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Farm Department.

Conducted by J. H. Brown, who lives on his farm at Climax, Mich., which is conducted as the Michigan Farmer Experiment Farm. All correspondence for this department should be sent to Climax, Mich.

THE EDITOR'S FARM NOTES.

HAVE PATIENCE.

Such a large amount of matter has been coming in during the last two months, with personal requests to reply to various queries or statements through these columns, that we must take some time to reply.

All matter must go in the various departments for which it was intended. For this reason we ask our correspondents to be patient if certain articles do not appear within a reasonable time. Keep right on sending in short articles, queries, suggestions, etc., as you have an opportunity.

ONE-DAY INSTITUTES.

For several days we have been attending these meetings in Livingston and Oakland counties. They have reached a larger number of the farmers of these counties than ever before.

It does seem as though nearly everybody "takes The Michigan Farmer" in this section. Many good words are frequently spoken, praising the work the paper is doing in all its departments.

SOME FARMERS' OPINIONS.

Now we shall give a few of the "opinions" expressed by some of the practical farmers as to their methods of "farming it" along certain lines.

A low down farm truck is a valuable tool on the farm. The wheels should be wide, and not too low down where heavy and frequent loads are to be hauled over a rough or stony surface.

The best place to put fresh barnyard manure is on grass land, preferably a meadow or pasture. The time to spread is when hauling out.

Manure is never better than when first made, unless to be used in truck gardening. Plenty of absorbents should be used to take up the liquid fertility when voided in the stables and pens.

Even straw, in a dry condition, can be applied to pasture land with beneficial results. The benefit comes in applying during the summer or fall months, to act as a mulch and furnish a little more humus or vegetable matter to the surface soil.

On soil where mixed husbandry prevails, any kind of material that can be applied and decomposed, thus adding humus or vegetable matter to the soil, no matter how much or little fertility it contains, is generally of more value in growing crops than a "good liberal application" of commercial fertilizer.

The average farmer does not grow as much fruit as he should, nor of a sufficient variety. Many farmers do not realize how easily and cheaply a patch of strawberries, raspberries, blackberries and grapes may be started and cared for on the average farm.

A small patch of one-half acre, set out and arranged for horse culture or

mulched, can furnish enough fruit in any season for one or more good-sized families.

Many apple orchards are "eyesores" on the farms simply because the trees have outlived their usefulness. They should be cut down and young trees planted in their places.

Deep setting of milk, from even two or three cows, is far preferable to the shallow open pan system. It is especially advisable, even during the cold winter months.

Milk should be set just as soon as possible after milking is over. The cream will rise better and a more perfect separation be secured under all conditions.

HANDLING MANURE IN THE STABLE.

A Happy New Year for The Michigan Farmer. May it do as much and more good in the future than it has in the past. Now just a word or so about a few things that are now in season for the farmers to think about.

This is the first winter I have made a practice of drawing manure from the stable to the field and I can say I am more than pleased with the plan.

The editor stated in a late paper that he used a wheelbarrow to take the manure from the stable, and then handled it over again to get it to the sleigh or wagon.

Now our stable is 30 feet long, and we have proved to our entire satisfaction that we can carry it out with a fork right to the stable door and place it on the sleigh or wagon quicker, and with less work than we can use a barrow. And then we take it right to the field and that is the end of it.

It is a very small chore to put the harness on a team, even if we have no other work for them through the day. After one has followed this plan for a little while they would never return to the old way of handling manure.

I think this is far ahead of the manure shed, for you save more time than the loss would amount to.

E. S. DUNBAR.

Jackson Co., Mich.

If we could arrange it satisfactorily we should provide a gang plank to run our wheelbarrow out upon from the stable door to the wagon or sleigh. But it has not been convenient to do this in our yard.

Were we to rebuild our stables we could arrange to have a lower place at the stable door and at the end of the gutters, whereby a wheelbarrow load of manure could be run out of the door, with the floor on a level with the top of the wagon box.

For us, it would be harder work to carry out the heavy, saturated manure on a fork or shovel, and we can also do the work quicker to follow the plan suggested in a previous issue.

For The Michigan Farmer.

SOWING GRASS SEED ON STUBBLE.

I harrowed five acres of millet stubble, east and west, this fall, then sowed timothy seed north and south with a so-called wheelbarrow grass seeder, and commenced harrowing over the seed north and south.

I had a trifle more than one-half of the ground harrowed, when I was obliged to stop on account of rain, which made the field soft and it could not be harrowed further.

When winter set in, that part of the field which was harrowed after sowing cast a green shade. The remaining part had a good catch, but was much inferior to the other in general appearance.

Do you consider the above plan safe to ensure a good crop? I intend to sow clover next spring.

Huron Co., Mich. W. E. McMULLEN.

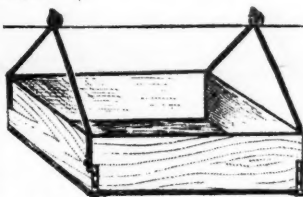
(Much depends on the season. We consider your treatment good, from what you state about the matter.)

But if you used a spring tooth harrow both ways across this field, did you not cover some of the seed too deep?—Ed.)

For The Michigan Farmer.

A HANDY MANURE CARRIER.

I send a brief description and rude drawing of a device gotten up by a local dairyman, which it seems to me is a great convenience about the dairy barn.



DAIRYMAN'S HANDY MANURE CARRIER.

It is a strong box, about three feet square, and say one foot deep, the bottom of which is hinged on by means of strong hinges made of wagon-tire at the local blacksmith's. The part that is fastened on the bottom is long enough to extend across the entire width.

A strong half-inch rod extending the entire length of the box passes through the eyes of the irons that form the hinges, and is made fast by a pin at the end.

At either end of the box pulleys are attached in long T-shaped irons bolted securely at each corner of the box.

A strong cable is stretched the length of the cow stalls, extending outdoors a few feet. On this cable the pulleys work and the box is held suspended.

The chore boy, when it comes time to clean out the stable, draws the box behind the cows and forks the manure directly into it. When the box is full he runs it outdoors (an easy task), unloosens the hasp which holds the bottom secure, and the cargo of fresh manure drops out upon the wagon kept at the door to receive it.

The box will carry the dung of several head. This is a great convenience where a man has 30 or 40 head of dairy cattle, and permits of a great saving in fertilizer, as the manure is drawn to the field as soon as the wagon is loaded.

Those (should there be any) who do not think the above practical, should try it. I believe four pulleys, on a firm 2x4 oak track, would be more satisfactory than the wire cable.

ANTONY WELLMAN.

Livingston Co., Mich.

(We believe that, in many horse and cow stables, this would be a practical and very convenient device to carry

manure out of the stables to the wagon, manure spreader or pile outside.

It seems to us also that a 2x4 wood, or a steel track, would be far preferable to the wire cable for this purpose. An ordinary hay carrier could be utilized, by slightly changing the overhead attachments of the manure car.

By using a hay carrier, the wood or steel track could be attached to the overhead stringers of the stable. Then the manure carrier could be suspended lower in the stable or elevated as required.

This is somewhat on the plan of the carrier we devised some years ago, except that the bottom had double hinged doors. These opened in the middle, one half of the bottom swinging each way.—Ed.)

For The Michigan Farmer.

SUCCESS WITH CLOVER.

Father says, "better lose a crop of wheat than a catch of clover," but we will not classify this paternal saying as a maxim, as probably all will not agree with it.

However that may be, it is certain that it is hard to overestimate the value of clover to the farmer.

We have always thought that the idea that clover needed a "nurse crop" was an untamed humbug. What a strange kind of nurse it would be that would drink all the milk and let the child go hungry. But this is what the wheat does; drinks all the milk from the land and lets the "kid (clover) holler."

Perhaps we are wrong in this, but so strong was our belief that clover would do better to have the first chance at earth's bosom, that last April we plowed up about 17 acres, fitted it and sowed on nothing but clover seed. The result has been so satisfactory that we shall not hesitate to try it again if necessary.

At the same time we shall not neglect to seed down "every foot" of our wheat ground in the good old way, calling ourselves lucky if we get a catch once out of three times.

The experiment referred to above was performed on two separate fields, one of six and one of eleven acres. Each piece was treated differently, as regards covering the seed, so as to find out the best way. The larger field was seeded on a rolled surface and then dragged with a common 40-tooth drag. The smaller piece was seeded on the ground as fitted by a spring-tooth harrow, and covered by rolling.

In connection with this we would also mention a field on the farm of neighbor Marsh, who also has some of this "clover sick" (for want of) land, that was fitted in the same way as ours. But he did not cover the seed at all.

These tests would seem to show that it is not necessary to cover the seed, as all three pieces seemed to show an equally good growth in the early part of the season.

One important point in connection with the plowing should not be

omitted. Mr. M—'s field was partly fall plowed and finished in the spring, and we could see quite a difference in favor of the fall plowed portion. We last fall plowed five acres, hoping thereon to install clover as king where sorrel has so long held sway.

This method of growing clover has proved successful to such a degree, in this very dry season, when all of our new seeding on wheat is almost an entire failure, that we can recommend it to our brother farmers who are in the "same boat" as we.

Of course, this article will of no interest to those who are so fortunate as to get clover whenever they sow it in the regular way. I have noticed that some of my friends who live on stony farms seldom fail to have a catch of clover, and it seems to me that this is but just and right, for the man who "rattles his bones" over a stony farm all his life ought, as some compensation, to have all the clover he wants.

Calhoun Co., Mich.

(Last spring we sowed clover on two fields, at the same time, and on wheat ground. On one field we secured a fine catch and a good growth of clover, while the other, though a fair catch, practically all died out in the month of June. We don't understand it yet.—Ed.)

For the Michigan Farmer.

FARM ACCOUNTS.

I think one of the greatest of the many mistakes we have made on our farm this year, and which, in fact, we have neglected altogether too much in years gone by, has been in not keeping some thorough, simple and systematic form of accounts.

This is one branch of farming which our farmers have neglected more or less. I, for one, have come to the conclusion (having my determination stimulated by having to pay a bill the second time during the past year) that it is quite as necessary for me to keep track of my business as it is for the merchant.

And I hope, by so doing, to be able to stop some of the small leaks on the farm which have been taking away some of the profits and helping to make the hard times for us.

If we farmers could get hold of some account book, gotten up in good style, with the headings of each account all in good shape, something that would save us the work of writing everything down, then, I think, we could keep books without a bookkeeper.

I am determined, the coming year, to work this part of my farm business just as thoroughly as my fields, and know for once just how I "come out" at the end of the year.

(We admire your determination. We think you can obtain the book you want by writing The Farmer office, Detroit.—Ed.)

For the Michigan Farmer.

TESTING CLOVER SEED.

In the senior year, before graduating in the Agricultural College, each student is required to prepare a thesis giving the results of some original work.

In 1896, J. D. McLouth, of Addison, examined 75 lots of clover seed, procured in the open market from dealers in Michigan and Chicago. Samples from rural dealers or farmers were as good as any.

Five grams of each sample were examined for seeds of weeds, rubbish and other kinds of seeds. Several other points were considered, but need not here be mentioned. Foreign matter, other than seeds, was of little importance. To determine the per cent of living seeds, two lots of 50 seeds were tried in a seed tester in the botanical laboratory.

Of the 75 samples, 37 tested 95 per cent. or above of good seeds; 27, between 85 and 95 per cent.; nine between 75 and 85 per cent.; and only two below 75 per cent. Two samples contained only .0002 per cent. of foreign matter; 59 samples contained over 95 per cent. of good clover seeds; eleven samples went between 90 and 95 per cent., and only three went less than 90 per cent.

Many common weeds were represented, one sample of five grains containing 1,217 seeds of rib grass, or narrow-leaved plantain. Another contained 559 seeds of timothy, a third 445 seeds of timothy, and a fourth 408 seeds of self-heal, a common weed of the mint family. Sheep sorrel, bottle grass and tumbleweed were represented by more than 100 seeds of each of several samples.

In some samples were found seeds of narrow-leaved or of broad-leaved dock, stick seed, barnyard grass, com-

mon plantain, pigweed, tumbleweed, ragweed, bull thistle, Canada thistle. Even a very few seeds of some of these weeds in now and then a sample of clover seed, shows the importance of caution in procuring seed of so common a plant as red clover.

W. J. BEAL.

Mich. Agr'l College.

(This is one of the many practical things that Dr. Beal sets his boys to doing. The above experiment and test is of the greatest value to every farmer in the land. How we would enjoy a full course of instruction and practice in the Doctor's botanical laboratory!—Ed.)

For the Michigan Farmer.

A FARM ITEM FROM INDIANA.

Wheat is looking fine here, at least 100 per cent. I have 12 acres plowed for corn next spring.

Fall plowing for any spring crop is much the best. Stubble, weeds or grass is better turned under during the winter.

What is turned under should stay covered and not be torn up with a spring-tooth drag. A spring-tooth drag is worth nothing to me.

G. W. BLAND.

(Sorry for the spring-tooth harrow, but it is relied upon too much for a general purpose tool.

It is a good tool for clean ground, but does more damage than good on trashy ground, and especially where June grass is firmly established.—Ed.)

For the Michigan Farmer.

HOW MANY BUSHELS PER ACRE.

In your issue of December 25, (Notes and Comments), is asked "How many bushels of wheat can be grown on an acre?"

The past harvest, from an acre, actual measurement, I threshed seventy bushels of No. 1 Clawson, of the white variety. This is one acre from a field which yielded forty-five bushels per acre.

The soil on which this grew is a black sand, from which a fine crop of oats had been harvested the previous year.

I used 100 pounds of commercial fertilizer per acre, drilled in with the grain drill.

You can judge of the quality of this crop, as nearly my whole crop was disposed of early for seed at \$1 per bushel. The straw stood six feet in height, and yet there was not a handful of lodged straw in the field.

I have grown this variety for several years, and am satisfied that there is none better. I now have a field of 18 acres, which bids fair to give me as large a yield next harvest.

This is on a fallow; plowed in June, and sowed wood ashes at the rate of 30 pounds per acre. Will let you hear from me next harvest.

Oakland Co. A SUBSCRIBER.

(It hardly seems possible that such a large yield could be secured, under the conditions you mention. But it has been done, we are assured, and can be done again. However, we have sowed 400 pounds of the same commercial fertilizer, on one acre of our ground, when sowing wheat, and never saw any difference in growth or actual yield, compared with ground beside it.—Ed.)

For the Michigan Farmer.

FROM THE PACIFIC COAST.

I read in your issue of August 21, a description of Dawson's Golden Chaff, and that some heads had forty-six kernels, so I thought I would send you a few samples of different varieties of our Washington wheat.

You will find it will average over forty-six kernels, but right here in Whitman county is the garden spot of the world for wheat. I have raised wheat here for seventeen years, and my crop has always averaged from twenty-five to sixty bushels per acre.

I came to this State from Saginaw, Mich., 21 years ago, and though I think Michigan one of the finest states in the Union, considering her resources, I have been in all the western states, and think Washington has the finest prospects of any state.

We have vast forests of fir and pine, mines and fisheries, and the finest harbors in the world. When it comes to wheat, barley and oats we cannot be beaten. But corn, clover and timothy are a failure. Our climate is not so cold in winter nor so hot in summer, but a great deal pleasanter. I am a subscriber to The Michigan Farmer, and think it the best farm paper in existence.

Whitman Co., Washington. G. A. S. (The heads and samples of wheat reached us in good condition, and

were certainly fine specimens as to size, plumpness and quality.

As to the points of superiority, we also consider Michigan on a par with any State in the Union. We, too, have forests, mines, fisheries and plenty of harbors on our immense stretch of fresh water coast. We are glad to hear from you, and hope you will write again.—Ed.)

For the Michigan Farmer.

NOTES AND COMMENTS.

Last spring there was an attempt made to introduce spring wheat here. Only a few farmers tried it, and a majority of these did not find it satisfactory. The yield was not as good as was obtained from winter wheat, and some fields were badly injured by insects. It is not likely that the amount sown next spring will be very large.

Occasionally a man is found who feels like giving spring wheat a second trial. One of these informs us that he harvested a good crop, though not quite equal to the winter wheat on the place, but as it was a corn stubble he was well satisfied.

His plan is to follow corn with wheat, sowing as early in the spring as the ground can be made ready. Then in the fall sow to winter wheat. By this means he gets an extra crop of wheat in place of the oats which have previously come in the rotation.

At present prices he finds that an average crop of spring wheat is better than one of oats, and his soil is a kind of clay which has proved good for the former and unsatisfactory for the latter.

Undoubtedly under some conditions spring wheat might be grown to advantage, but it is not likely to become popular here very soon, nor even to have a fair trial. The prejudice against it is too strong to be easily overcome.

Some of the older inhabitants tell us of the time back in the forties when spring wheat was raised in this part of the State. One year the yield was very large, and as was to be expected the seed was in great demand for sowing the next spring. The crop the following season was a failure. Many fields were not harvested at all.

Spring wheat went out of fashion and has remained out since. It has a reputation for fickleness which the newer varieties may not merit, as spring wheat should have improved during this time as well as other things. But our wheat growers do not care to take the risk of finding out its true value at the expense of a crop or two.

The samples of grain raised here which we have seen were good. The berry was dark but hard and plump, and such as might be expected to make a good flour.

The rape plant is growing so rapidly in popularity that anything regarding it is of interest, which is our reason for giving the experience of one man with it last summer.

The seed was sown on oat ground at the same time as the grain, both being sown broadcast. The soil was a clay loam and in good condition for sowing. This is a way sometimes recommended. Perhaps in ordinary seasons it may be satisfactory, but in this case it was not. The rape grew rapidly and injured the oats.

When the grain was cut the rape had made such a growth that there was a mass of green stuff to be bound up in every bundle. As a result the bundles did not dry out, and the crop had to be threshed out at once to save it. The oats were less than half a crop.

The straw stack was a mass of mold and decay by winter time, unfit for anything except bedding, quite a loss on this farm, where the oat straw is used for a sheep fodder and no wheat is raised to supply its place.

But the loss was not without a gain in another direction. After harvest the rape grew rapidly and made pasture for a hundred sheep till cold weather, with an abundance to spare. This was on thirteen acres. The sheep were at first fed grain in the morning, then turned on the rape after the dew had dried. Less than half the pasture, we were told, would have been sufficient.

The conclusion arrived at in this case was that if half the field had been sown to oats alone there would have been more grain, besides a good crop of straw fit for feeding. If the other half had been sown to rape without the grain it would have been sufficient for the pasturage required and would have been available some time before the oats were ready to cut. Altogether this would have been an important gain.

Is it wise to sow such a rank growing plant as rape with oats? We were told that last year was exceptionally favorable for the rape. But is it best to take such chances? Perhaps on lighter soils the rape would not grow large enough to interfere with the oats, but we do not feel like trusting it.

Will some of those who have had experience enlighten us? The plant has been grown very little by the farmers here, but there is considerable interest taken in it and inquiries regarding it are frequent.

Oakland Co., Mich.

F. D. W.

(In these southern counties there is no reason why anyone should undertake to grow spring wheat. But in some of the extreme northern counties, including the Upper Peninsula, we have found spring wheat growing very successfully.—Ed.)

For the Michigan Farmer.

FROM AN ILLINOIS READER.

LIKES THE MICHIGAN FARMER.

A few days ago I sent to the editor of Hoard's Dairyman my renewal for that paper, also for your own.

But I wanted to drop you a line and tell you that I thoroughly enjoy The Michigan Farmer.

I have read it one year, and feel that I have received from it, both in pleasure and profit, many times its cost.

Farming with us differs in many respects from the same work with you, but, having been raised a Michigan boy, I can appreciate the Michigan side of it, and, at the same time, get much of value from every issue.

Shabbona, Ill.

A. J. L.

(Many thanks for your kindly expressed appreciation. The Farmer hopes to receive some of your own farm experience for publication in its columns.—Ed.)

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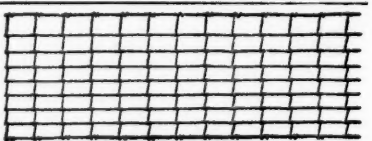
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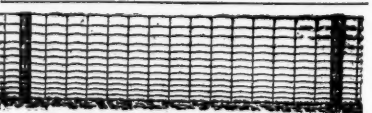
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STATE SWINE BREEDERS' ASSOCIATION.

This association held its annual meeting at Lansing on December 14, with President Rouse in the chair. After the report of the secretary-treasurer had been read and adopted, Mr. J. H. Banghart, of Lansing, read a paper on the practice of some breeders advertising "satisfaction guaranteed." Mr. Banghart said:

We frequently see in breeders' advertisements this proposition, "we guarantee satisfaction." My experience tells me that I cannot afford to do so. The most of my sales are made by mail to persons whom I have never met, and sometimes to parties that are entire strangers to me. They usually write for price of pigs of a certain age, or size. In quoting prices I must describe the pig to the prospective purchaser, and be very careful not to represent it to be a better specimen than it really is. If the sale is made I am to send him as good as described, or better, and expect my customer will be satisfied.

During my experience I have sold three hogs for breeding purposes which failed to breed. A gilt bred and shipped proved not to be safe in pig. Two males also proved to be impotent. In these cases I gave each party a pig of the same age as the one he bought, and all were satisfied.

I find that in describing hogs by letter, two persons, equally good judges, may describe the same animal differently. Also that one may write describing such a pig as he desires to purchase, and from that description the breeder honestly believes that he can furnish him with just what he wants, when, if the buyer were present, he would select a pig quite different in style. In such cases, the purchaser is not satisfied when he receives his pig, and may blame the breeder for sending him just such an animal as he had ordered, instead of such a one as he had pictured in his mind but failed to describe.

I remember a case several years ago where I sold a pair of shoats to a breeder who had described to me by letter such stock as he desired to buy. I expected to receive a nice letter from him, because I had sold him stock before, and felt sure that I had succeeded in improving my herd since then; also, that I had this time sent him better pigs than he would expect. The letter that came said that "the pigs came all O. K.; that they were very nice Red Poland-China pigs, whereas he had expected Duroc-Jerseys." He was not satisfied. I think he got over it, however, because he has bought stock of me since.

I believe that when we sell stock for breeding purposes we should guarantee them to breed, and if they fail to do so, we should make it good. In some cases, however, the purchaser may be to blame by not giving the animal proper care. I would not guarantee to do something which might be impossible, and I believe to guarantee satisfaction to every man is more than we should do.

We need to be careful when describing our pigs to customers not to paint the picture too fine, because your black hog may have a little too much white, and there may be a fleck on your white pig. Of course your Duroc-Jerseys are golden, they are just as good as gold; but do not lead your customer to believe they are pure gold or he may not be satisfied.

The ideas expressed in the paper were generally indorsed by the breeders present, and as outlining the only safe course for a breeder to pursue.

R. Gibbons, of The Michigan Farmer, was called on for a few remarks regarding the present position of the swine industry. In response he said that at the moment swine breeders and feeders were hardly in as good a position this season as those who were handling sheep and cattle. Such changes must always be expected in raising all kinds of live stock, but they were always temporary in character, and sure to be followed by seasons of high prices and remunerative business. The hog must always be a leading feature in the agriculture of the State. He referred to the changes which are taking place in the swine industry through outside influences—the decreased value of lard, and the development of the bacon trade; also the enormous amount of fresh pork now retailed in all the towns and cities as compared with even ten years ago. He thought the tendency was steadily to-

ward a hog that Michigan, with her variety of grains and forage crops, was probably in better shape to produce than any other State. The new breeds sought to be introduced under the name of bacon hogs he did not believe would ever take the place of those improved breeds which had become so closely connected with the live stock interests of this State. He could not see what benefit would come from the introduction of a hog shaped like a pumpkin seed or a sun-fish, which would require 50 per cent more feed to produce a given amount of pork, and a third longer time than the breeds we now have. Both breeders and feeders, however, should make such changes in feed and management as would enable them to better meet the requirements of the market. They should not be afraid of a little coarseness in their hogs. Strong bone was essential to activity and vigor, and activity was necessary to produce muscle, or lean meat. A pig without bone enough to carry him to market in good condition was nearly worthless. Given plenty of bone and an active hog we have the basis for the hog desired by the bacon curer and the retailer of fresh meats. It means a mixed diet, with ample range while growing, and not too much corn until the time for finishing comes. The hogs coming into the Detroit yards the present season are of excellent quality. Would recommend that they be made as even as possible in size, weight and color. Mixed colors in a bunch of hogs detracts from their selling value. No matter whether black, white or old gold, have them all alike. There are very few of the old scrub or razor-back hogs in Michigan, but if some of these new breeds are brought in there will soon be plenty of them.

Mr. Banghart indorsed what was said regarding the increased demand for fresh pork. He said that a few years ago he had fresh pork on sale one day a week; now he had it every day and the demand was steadily increasing.

Mr. Conrad, of Waucousta, indorsed the suggestions on breeding and feeding, and said they met his views.

The question of public sales was then taken up at the instance of Secretary McIntyre, and several parties spoke strongly in favor of the idea. They referred to the enormous prices paid in other States as the result of advertising and working up the public mind regarding the value of certain lines of blood, etc., and thought Michigan should not be left so far in the rear when she could show as good hogs as any State in the corn belt.

A. A. Wood was called on for his opinion, and he indorsed the idea of public sales as a means of advertising the quality of Michigan hogs. He believed there was money in it. Had been at the Illinois State Fair the past fall, and paid particular attention to the quality of the hogs shown. Had also priced young pigs. He felt he was safe in saying he had sent out to his customers, at from \$15 to \$25 per head, better pigs than he could have purchased there at \$50, \$75 and even \$100 per head. Thought it was the system of public sales and big advertising that enabled the breeders of those States to get such prices.

Mr. Conrad said he had advertised considerably, sometimes in the swine journals, but had never received returns except from home papers, and in this respect he would especially mention The Michigan Farmer. He wanted to know how it was. Others gave their experience as in line with that of Mr. Conrad.

R. Gibbons was asked for his opinion regarding the advisability of public sales. He said there was no other way in which the breeders of this State could place themselves in line with others than by a system of public sales. It would be a little slow at first, but if persisted in, finally breeders from other states, learning of the quality and low range of values of Michigan hogs, would soon appear in numbers sufficient to guarantee successful sales. He referred to the statement of Mr. A. A. Wood as to the quality and prices of prize-winning hogs in the corn States. Referring to the question of advertising he said the reason why Michigan breeders did not receive returns from the swine and live stock journals was this: The men who took such journals were breeders. When they bought they wanted reputation as well as breeding and merit in their hogs. As a rule the swine breeders of this State had not secured a national reputation, and therefore breeders from other States did not become customers for their stock. In Michigan it was different. The customers were generally farmers or small breeders, who did not care so much for reputation but wanted a good hog at a low price; hence, find-

ing they could get such hogs cheaper and better in Michigan, they confined their purchases to the breeders of this State. So long as present conditions lasted it would seldom pay a Michigan breeder to advertise outside of the State. A system of public sales and liberal advertising of them in other States were the only means to change the situation.

A number of other questions relating to the business of the association were discussed, after which the election of officers followed and resulted in the choice of the following: President, L. W. Barnes, Byron; vice-president, E. A. Bush, Fowlerville; secretary and treasurer, George H. McIntyre, Iosco.

For The Michigan Farmer.

A TERRIBLE MISTAKE.

In the last issue of The Michigan Farmer, page 44, first column, near the bottom, under the heading "Remedy for Thrush," "to be given internally," is the following recipe: Cream tartar, 3 oz.; nitrate potash, 3 oz.; podophyllin, 2 oz.; zingiber, 2 oz.; sulphate iron, 2 oz.; fenugreek, 1 oz. The terrible mistake here is in regard to the podophyllin. This drug is the active principle of the mandrake, or may apple, and it takes one pound of the root to make one ounce of podophyllin. A great many physicians don't know the difference between the "podophyllin" and the "podophyllum" peltatum, which is the botanical or Latin name of the plant. Now take 2 oz. of podophyllin and you have the strength of 2 lbs. of the crude root. Just think of giving 2 lbs. of the root twice per day for three days, with the rest of the compound. Now I want to say most emphatically that one of two things would happen: You would have a ruined horse or a dead one. And he might as well be dead as ruined. My father was a horse doctor in eastern New York, and I have gathered this root for him many times. He used to prepare it in the following manner: Take a handful, which would represent about one ounce, grind to a coarse powder; cover with boiling water one pint, and keep hot for one hour but do not boil; strain. Add one heaping teaspoonful of ginger, and one pint of New Orleans molasses. If the horse would eat, give in bran mash; if not, by drench. Give twice per day. Three or four doses were sufficient.

I have corrected this same mistake a great many times in the hands of farmers, and physicians, too. As a general thing there is no need of giving a horse such powerful drugs. They do more hurt than good. Give the horse four or five quarts of scalded bran with a pint of molasses twice a day, and the second or third day will be plenty. At the same time give some apples or potatoes—sweet apples if they can be got. Your horse will come all right, and be as gay as a lark in a few days.

A. L. H.

A SURE CURE.

The announcement comes from Washington that the government, through the experts of the Department of Agriculture, has proved the efficacy of the use of serum in treating and curing hog cholera. This announcement, it is said, carrying with it an absolute assurance of responsibility, will be hailed with delight by thousands of farmers, especially in the great corn sections of the West and Northwest, where large droves of hogs are raised but where the farmer's entire capital, both principal and profit, is liable to be swept away in a single month by the devastations of the cholera. Secretary Wilson will soon issue a statement on the subject, showing the work that has been done by the Department in this line in the past season. It has been absolutely demonstrated, and on a comparatively large scale, that the majority of cases of hog cholera can be cured by inoculation of the affected animals.

The serum referred to is made by inoculating a horse or cow with germs of the disease, and then injecting the serum from such animal into hogs affected with cholera. The Secretary says that in one case 82 per cent of the affected hogs in a large drove were saved by the use of this serum. He also says that "statistics gathered in Iowa for the year 1896 show that the farmers of the State lost \$15,000,000 through cholera and I should judge the whole country loses not less than \$100,000,000 annually through this disease. Besides many men are kept from engaging in the industry because of their fear of having everything swept away."

Dr. Salmon, chief of the Bureau of Animal Industry, in talking on the subject said that as soon as the farmers find out about this matter he expected

the Department would be flooded with inquiries and applications, and he proposes to be as well prepared as possible. Secretary Wilson is therefore going to make a recommendation to Congress for this work. "It is going to cost about 10 cents an animal for this inoculation," said the Secretary, "and I suppose we should have at least several hundred thousand dollars placed at the disposal of the Department. If the matter is to be gone into, it seems to me the Government is the one to undertake it, as if left to private concerns, large prices would be charged and an unreliable quality of serum would in many cases be offered."

If a complete, or even a partial remedy has been secured against this disease, certainly it will be a great boon to farmers, as nearly every one raises a few hogs. In fact, hogs are generally regarded as an indispensable adjunct of every well conducted farm. The losses by cholera are severely felt because individual herds have to stand the losses, while others escape and really profit by these losses.

As to the losses to the country at large we believe they are largely overestimated, because an epidemic of cholera is sure to be followed by high prices for hogs, and this recoups the losses to a considerable extent. This past season, for instance, saw large losses from cholera. In spite of that, however, the receipts of hogs have been so large as to cause a reduction of fully 50 cents per hundred from top prices. If no losses had been sustained, where would values have gone to? We don't believe hogs would be selling at \$3 per hundred to-day if there had been no cholera last fall. The markets would have been overrun and demoralized. In figuring losses it is best to see if there are not some compensations to off-set them.

STOCK NOTES.

W. S. Bridge, of Trenton, this State, writes: The 800-lb. Holstein bull advertised in your columns a short time ago was sold to Mr. Deyo, of Denton, Mich. I think The Michigan Farmer just the paper to advertise in.

The annual meeting of the Michigan Jersey Cattle Club will be held at Ypsilanti, in connection with the meeting of the Michigan Dairymen's Association, February 1, 2 and 3, next. One session will be devoted to the Jerseys and their interests. Special rates on all railroads and at the hotels. All interested are invited to be present.

A pioneer cattleman of Idaho, recently speaking of the cattle situation there, says there is hardly one-tenth the number of cattle in Idaho that there was during the flush times a few years ago, all owing to the encroachment of sheepmen, who are crowding onto the western ranges. He does not think there will be any more large herds in that country.

The American Tamworth Swine Record Association has been incorporated under the laws of this State. Its officers are as follows: President, B. F. Miller, Flint; first vice-president, George G. Winans, Hamburg; second vice-president, George Blisky, Burton; secretary, E. O. Wood, Flint; treasurer, John G. Carton, Flint; board of directors, E. O. Wood, Flint P. Smith, B. F. Miller, F. H. Rankin, Jr., John G. Carton. The headquarters of the association are at Flint, Genesee Co. The capital stock is \$2,000, divided into shares of \$10 each.

Hood's Sarsaparilla feeds the nerves on pure blood and thus prevents and cures nervous prostration.

THE PLUM HILL HERD of large English Berkshire swine, B. P. Rock and S. F. Hamburg fowls, Stock and eggs for sale. C. M. BRAY, St. Johns, Mich.

EVERGREEN STOCK FARM.—Black Percherons, French Draft and French Coach Stallions for sale. Special attention is called to our imported French Coach Stallions. Send for catalogue and descriptions. We also have carriage horses and draft horses for sale. Come early and make selections. THOMAS CROSS, Bangor, Mich.

AUCTION SALES

January 22d the first of a series of sales of horses will be held on my farm at Pontiac, beginning at 1 p. m. The horses offered will consist of drafters, trotters, pacers, farm chunks and general purpose animals. The sale will be repeated on Saturday of every week until further notice. Terms, 3 per cent off for cash, or approved notes at 7 per cent per annum. At same time will offer a lot of choice breeding ewes. HENRY C. WARD.

SEE THAT HOOK? WITH THE IMPROVED CONVEX DEHORNER you can cut off any size, shape or kind of horn without crushing. No other dehorner will do this. Catalogue free. WEBSTER & DICKINSON, Christina, Pa.

BARRED PLYMOUTH ROCKS, exclusively. Extra good cockerels for sale. Prices \$1.50 each, two for \$2.50. FRANK H. OLIN, Kalamazoo, Mich.

The Horse.

CONDUCTED BY ROBERT GIBBONS.
Address all correspondence to MICHIGAN FARMER,
Detroit, Mich.

IS BETTING ESSENTIAL TO SUSTAIN RACING?

We find the following in the Drovers' Journal regarding the question of betting and pool-selling at races, and as it refers to several phases of the subject which are not always given consideration when the subject is being discussed, we give it a place in our columns:

"Some breeders advocate that betting on racing events is essential to the perpetuity of the sport. The origin of racing was to furnish public amusement and improve the speed and stamina of horses. Race meetings have been elevated to the plane of national diversion and if properly conducted offer a source of healthful recreation and constant improvement in the quality and value of American horses. The managers of racing associations are trying to solve the problem of how to conduct meetings without financial loss. Shall they depend on the gate receipts or on the sale of betting privileges for revenue to meet current expenses? Let a disinterested spectator view the ensemble in the grandstand, who paid at the gates, and often also had to pay for a seat in the amphitheater, who are attracted to the meeting from love of the sport, and then let him saunter down to the betting ring and view the miscellaneous crowd, and he will discover that the majority of them sport complimentary badges. In other words, the association derives no revenue from admission fees from the professional gamblers and condone the nuisance for the money obtained by the sale of book-making and pool privileges. The great conspiracies and the odious turf scandals that make racing unpopular are concocted in the betting ring. The plunger who has bet his shekels on the event, if large stakes are wagered, will try to control the results, even if it requires fixing horses and bribing drivers. The general public is not interested in the speculative results of the races, but they desire to see an honest contest and are attracted to the meeting out of admiration for the sport. It is for associations to choose to which element to pander to promote the popularity of turf events, the crowd that pays at the gates or the betting element, the one class attracted to the meeting for recreation, and the other element for speculation. Which is wiser, to cater to the patronage of the many, or the revenue derived from the sale of privileges to the few?"

In view of the fact that this city and vicinity is becoming a racing center because other states have legislated to suppress all sorts of gambling on their tracks, would it not be well for those who are promoting these meetings to consider whether the gamblers, confidence men, touts, and race track followers generally, are not allowed too many privileges at these meetings, to the detriment of the public, the racing, and the character of the attendance. The coming season there will be running meetings at Grosse Pointe, Highland Park, and across the river at Windsor. Then there will be light harness meetings at Highland Park and Grosse Pointe. During the summer months there will be racing at some point near the city about every day, and there will be the usual course of thieves and gamblers which are always on hand at such gatherings. Last year several business men of this city became infatuated with racing, spent the greater portion of their time at the tracks, neglected their families, frittered away their money and are moral wrecks and defaulers. The question is, must such sacrifices be made to improve the breed of horses? Are good horses of more consequence than good citizens? Is the State under moral obligations to protect its citizens from the insidious temptations of gambling, and the community from such assemblages of the criminal classes as are brought together by these race meetings? These are questions sure to come up for settlement with the extension of racing in this vicinity.

D. O. C., Palo, Mich., writes: "Will you give the pedigree of Corbeau Medium?" Corbeau Medium, bay horse, foaled in 1883; got by Happy Medium 400; dam by Corbeau 98; grand dam by Tom Hale. Happy Medium by Hambletonian 10; Corbeau, a pacer, was sired by a Canadian horse of unknown breeding.

BREAKING AND TRAINING COLTS.

J. Scott McCoy, a trainer of acknowledged ability, and who last year developed the champion yearling trotter, the Merchant, gives the American Cultivator his system of breaking and training colts, from which we take the following extracts:

"About Oct. 1 we wean our colts. We put halters on them and place two of them in a box stall together, but do not tie them up, allowing them to be loose, with the halter stale hanging down on the floor of the stall. We let them run that way about 10 days. As a rule, at the end of that time they are halter broken, and you can tie them up or lead them, and the colt will not fight the halter. We then put a light colt harness on them, use a bridle with a small leather bit, turn them into a paddock, and in a short time we teach them to drive with the lines. This generally takes about three days.

"I don't intend to keep a colt in harness at the beginning more than 10 or 15 minutes at a time. That is when they are first driven in front of a pony. I do not believe in working colts on miniature tracks, neither do I think it a good plan to lead them by the side of a horse or pony, but teach them to drive ahead of the pony, and I ride the pony myself.

"In this way a person can break a colt's mouth more evenly, and at the same time he can note the gait and action of the colt, and make up his mind how to shoe him and what boots he will need. I work my colts in this way until about Feb. 1. I then hitch them to a light cart and as a rule by this time they are broken so they will go right off like an old horse.

"I have no regular rule as to the amount of work I give a colt. I always begin very light and allow the colt to dictate the amount of work he shall have. Above all things I never allow myself to get into an argument with my colts, but study how to keep them in good humor and cheerful in their work. One whip would last me a lifetime with them.

"The above is the way I broke and drove The Merchant, until about the first of last May. Until that time I had not tried to make any speed with him. I then began to step him along for a short distance at a time, and he soon learned to trot. The first of June he could step an eighth in 18½ seconds. During the hot weather I did not hitch him up more than three or four times a week. He was harnessed with just an ordinary harness, and goes with what is called a low head. He does not pull a pound while jogging, or when at speed. I had him well protected with boots, but he does not touch any of them. The shoes that he got his record in weigh six ounces each. He does not wear any toe weights."

HORSE GOSSIP.

The thoroughbred stallion Lord Lyon, after a long and useful life, died a few days ago near Square Lake, Oakland county, on the farm of the late Peter Hagle.

A writer in the Spirit of the Times predicts that Hamburg, the best two-year-old out last season, will break down in his first race. He has just been sold at a very high figure.

A proposed racing circuit for next season is Grand Rapids and Sturgis, Mich., and Elkhart, Ind. It would be all right if the associations do not get enthusiastic and offer purses they can never pay in full.

J. R. Keene has purchased the great race horse Ben Brush, and will send him to England to race. As he is a fast and game horse he should give the English horses a good argument in stake races.

The Illinois State Board of Agriculture has appointed a committee to arrange for the payment of premiums and settlement of all claims against the Chicago horse show for 66½ cents on the dollar. This is the result of the State Board attempting to run a horse show for duds. It should stick to its legitimate business of attending to the agricultural interests of the State, where it can find abundance of employment.

F. J. Berry, the Chicago horse dealer, in a paper read before an association of breeders at St. Paul recently, gave it as his opinion as well as that of expert horsemen everywhere, that this country will soon witness a horse famine. The ruinous prices of the past few years have driven farmers and breeders out of business. In the mean-

time the foreign demand for American horses was growing. The American horse industry would soon be foremost among the branches of agriculture if the farmers would give it attention.

As usual at the beginning of the year, the demand for horses in the cities is light and uncertain. In a few weeks, however, there will be demand to meet the requirements of spring business, and we look for a somewhat higher range of values and a more general demand. Reports from Chicago say that the low grades are selling lower or are held out of the market until the demand improves and prices strengthen. The export and eastern trade continues active. Horses blemished with bad wire marks, splints, immature curbs or small spavins are at a discount at present in the trade, but will be wanted at higher prices later in the season. Drafters, common to extra choice, sell at \$75@250; drivers, \$65@300; 1,300@1,400-lb. chunks, \$50@100; southern chunks and general-purpose horses, \$22.50@65, and western rangers and plugs, \$10@30. The horses that sell to the best advantage are heavy drafters of good quality, smooth, blocky 1,300 to 1,400-lb. chunks, stylish drivers, either coachers or speedy road horses of large size. Plain, heavy horses are selling at fair prices, and probably for as much as they will bring this season. Horses suited to farm work are selling somewhat better than they did a short time ago, but are expected to bring more money a little later in the season.

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Restore full, regular action of the bowels, do not irritate or inflame, but leave all the delicate digestive organism in perfect condition. Try them. 25 cents. Prepared only by C. I. Hood & Co., Lowell, Mass.

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We have imported more stallions from France since 1893 than all others combined. Write or call on us if you want the best of either

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The GREAT FRENCH VETERINARY REMEDY

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J. F. & E. W. ENGLISH, Clarksville, Mich., breeders of registered **RED POLLED CATTLE** Olney and Sultan head the herd.

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SHORTHORNS AND POLLED DURHAMS. Four young bulls for sale. Correspondence solicited. M. R. FREEMAN & SON, Flushing, Mich.

SHORTHORNS. If you want a good Shorthorn bull or heifer, a Berkshire pig of either sex, address N. A. CLAPP, Wixom, Mich.

W. M. FISHBECK & SON, Howell, Mich., breeders of registered **SHORTHORN CATTLE** from good milking families. Rosebud's Acklam Sharon 4th 120892 at head of herd. Stock or sale. No bulls except calves.

FOR SALE, 4 YEARLING JERSEY HEIFERS, Registered, of my best breeding. Address **THE ELLIOTT STOCK FARM,** Southfield, Oakland Co., Mich.

AN extra fine, pure-bred Holstein bull calf, 3 months old, from one of my long and persistent milking cows. Sire is from my sweepstakes cow at World's Fair, Chicago, 1893. Price reasonable. B. F. THOMPSON, Detroit, Mich.

SHEEP.

PURE BRED Hampshire Ewes from imp. stock at a bargain for the next 30 days. Inspection invited. J. H. TAPP, Mendon, St. Joe Co., Mich.

REGISTERED RAMS AND EWES FOR SALE at Rambouillet, U. S. A. THOS. WYCKOFF, importer and breeder, Orchard Lake, Mich.

SHROP. EWES bred to high class rams. Better than Klondyke gold. Write at once for price list. A. H. FOSTER, Allegan, Mich.

SHROPSHIRE HALL STOCK FARM.—Special prices on 75 choice registered ewes, all bred to imported rams and 30 choice ewe lambs, to make room for this season's second importation, to arrive in January. Also a few choice Polands and Berkshire sows and boars. State agent for the Black Diamond Sheep Dip, the best dip on the market to-day. I have tried them all. L. S. DUNHAM, Concord, Mich.

HOGS.

CHESTER White Swine and Lincoln Sheep. Either sex and all ages for sale. Sows bred for spring farrow. Write A. H. WARREN, Ovid, Mich.

5 POLAND-CHINA BOARS, spring farrow, at half price; 40 Pekin Ducks. Get our 1898 catalogue. E. A. CROMAN, Box 99, Grass Lake, Mich.

R. M. CROSS, Ovid, Mich., breeder of Victoria swine. Stock for sale. Breeding stock all recorded. Reasonable prices. Correspondence solicited.

P. C. WILKES sows bred to Victor "C" for April '98 farrow. Try one from the first premium herd of State Fair '97. L. F. CONRAD, Wacousta, Mich.

Duroc Jersey Hogs and Langshan Cockerels. Boars cheap. J. S. STONEBRAKER, El Paso, Ill.

SPECIAL SALE of 25 head of heavy-boned, choice Poland-Chinas. Spring and fall farrow. Stock always on hand. WM. L. PENNOCK, Hastings, Mich.

LARGE ENGLISH BERKSHIRES from extra strains, for sale by DARWIN FOSTER, Grand Ledge, Mich. Correspondence solicited.

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MERCHANT KELLY, Woodstock, Mich., breeder of **LARGE ENGLISH BERKSHIRES** Write for prices.

POLAND-CHINAS. Nice large spring sows, and fall pigs of either sex. Spring boars all sold. F. M. PIGGOTT, Fowler, Mich.

POLAND-CHINAS.—Choice sows already bred; choice male pigs; also M. B. Turkeys and B. P. Rock cockerels. O. B. ROBBINS, Edwardsburg, Mich.

Special Prices for Poland-Chinas for the next 30 days. Address M. M. GRIFFIN, Grand Ledge, Mich.

DUROC JERSEY SWINE. Spring and fall pigs for sale, both sexes. H. D. HALL, Martin, Mich.

DUROC JERSEYS, ALL AGES. Write for what you want. C. C. BRAWLEY, New Madison, O.

VILLAGE VIEW HERD OF P. C. SWINE. Spring boars and fall gilts at big discount. Pekin Ducks. J. C. TAYLOR, Grass Lake, Mich.

N. A. CLAPP, WIXOM, MICH., breeder of **Large English Berkshire Swine.** Write for prices.

GRAND RIVER HERD OF O. I. C. JOHN BERNER, Prop., Grand Ledge, Mich. My stock comes direct from L. B. Silver Co. Write for prices.

POLAND-CHINAS. One grand yearling boar; choice young boars and sows, something to head your herd. Write or come and see them. L. W. BARNES, Byron, Shiawassee Co., Mich.

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Hastings Stock and Poultry Farm, breeder and shipper of Poland-China swine, B. P. H. chicks and M. B. turkeys. Write for bargains. WILLARD PERRY, Hastings, Mich.

Special Sale of Chester Whites at CASE VALLEY FARM. Lot of fall and spring pigs, dandies, at ½ their value. Write to-day and secure a bargain. W. W. BALCH, Deford, Mich.

25 HEAD OF YOUNG BOARS ready for service 7 to 12 months old. Fine, strong, growthy, of Wilkes, Free Trade and U. S. strains. Prices low for quality. J. E. HAINES, Minerva, Stark Co., Ohio.

NOW READY Poland-China Herd Headers, quality and finish combined. Sired by Roy Wilkes 41517. Grand breeder, seven firsts and one second at Washtenaw county Fair. Also sows. G. W. INMAN, Ypsilanti, Mich.

DON'T YOU WANT A B. C. SOW? COCKEREL? Hickory Grove has some great bargains. Also spring boars and fall pigs. A. A. WOOD, Saline, Mich.

First Premium Herd of Poland-Chinas. Sows bred to KING KLEVER for sale. Also some fall pigs. We won over one-third of the premiums offered at the Mich. State Fair in '97, winning all the firsts, 8 medals competing. E. J. L. HARRINGTON, Paw Paw, Mich.

PRINCE U. S. heads my herd of Poland-Chinas; he by Corwin King 17071, dam by Quality 12457. Sows bred, for sale, fall pigs of Klever's Model, Tecumseh and Black U. S. strains. Also Light Brahma chicks. E. D. BISHOP, Woodbury, Mich.

KLEVER'S TECUMSEH heads my herd of Poland-China - Chinas; weigh 200 lbs. at six months, extra length and great depth. Sired by the \$5,100 Klever's Model, dam by the great Chief Tecumseh 2nd. Write your wants. WM. H. COOK, Waterford, Mich.

W. O. WILSON, Okemos, Mich., proprietor of the Michigan Central herd of **IMPROVED CHESTER WHITES.** Choice pigs of March and April farrow, either sex and pairs not akin. Write me just what you want. Light Brahma cockerels at \$1 each.

W. O. WILSON, Okemos, Mich., proprietor of the Michigan Central herd of **IMPROVED CHESTER WHITES.** Choice pigs of March and April farrow, either sex and pairs not akin. Write me just what you want. Light Brahma cockerels at \$1 each.

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Sheep and Wool.

CONDUCTED BY ROBERT GIBBONS.

Address all correspondence to MICHIGAN FARMER, Detroit, Mich.

BREEDERS OF OXFORD DOWNS.

On Tuesday of last week the American Oxford Down Record Association met at Flint, Genesee county, in connection with the Michigan State Association.

George McKerrrow, of Wisconsin, President of the American Association, called that body to order, and made a short address. Reports from the Secretary and Treasurer showed the financial condition of the Association to be sound.

After a talk by Mr. Burch, of Chicago, on the sheep industry, the constitution and by-laws of the Association were read and referred to a committee for any changes that might be deemed advisable. This committee were also instructed to investigate and determine whether the Association, which was organized under the laws of Ohio, could legally hold its meetings outside of that State. During the past fifteen years every annual meeting was held in Ohio, this being the first departure. President McKerrrow, Secretary B. F. Miller, of Flint, and Aaron Bordwell, of Fargo, N. Y., were appointed a committee to look up this matter.

The Michigan Association met in the evening. The meeting was called to order by President H. J. De Garmo, of Highland, who read an excellent paper on the history of the Oxford Down sheep. The Treasurer's report showed a balance to the credit of the organization. Many new members were secured by the State organization.

The visitors were banqueted by the members of the Genesee Oxford Down Association. Each of the organizations re-elected the officers of the past year. The American Association will hold its next annual meeting at Brantford, Ont.

For The Michigan Farmer.

HAMPSHIRE SHEEP.

This valuable English breed of middle-wooled sheep is unrivaled in its rapid and wonderful early maturing qualities. It possesses a hardness of constitution adapted to all climates, whilst in quality of mutton and large proportion of lean meat it is unsurpassed.

At the great Smithfield Club Show in London, Dec. 1896, Hampshires exceeded any other breed in number of entries. The live weight of the 22 pens of wether lambs exhibited (three to a pen) averaged no less than 197 lbs. per head at ten and a half months old, and a few of these lambs stood reserve for the champion plate for the best middle-wooled sheep in the show against wethers 21½ months old. A Hampshire also took first prize in the dead carcass competition against all other middle-wooled breeds.

According to history, the Hampshire originated in Hampshire, England, about the beginning of the present century, by blending the old Wiltshire and native Hampshire, and crossing with the Southdown. Mr. Humphrey, a breeder of great skill, is accredited with the rudimentary work in the founding of the breed, and Mr. Jas. Rawlence with the subsequent development and perfection of the Hampshire of the present type.

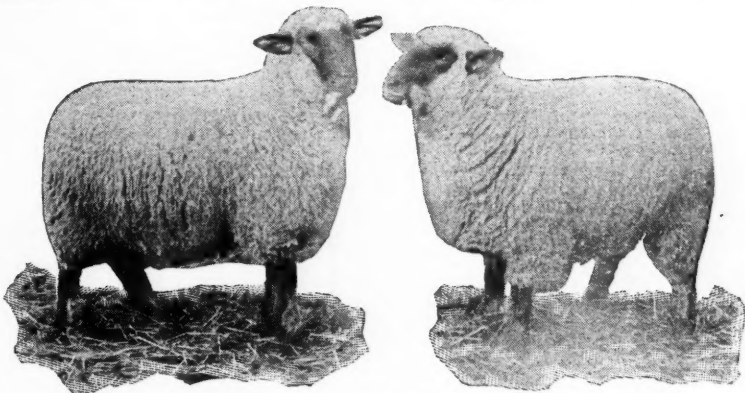
Mr. Humphrey obtained recognition for the breed at the Oxford Royal as early as 1840, but not until 1857 were the Hampshires accorded a class at the Royal show. From that time to the present the Hampshire has held a prominent place in British farm economy, Hampshire crosses having won first place in a large per cent of the mutton feeding tests and fat wether exhibits of England.

The Hampshire is next the largest of the Down breeds (the Oxford being the largest), and the wonderful precocity of the lambs, which often make a growth of over a pound each for every day for the first 100 days from birth, has made the breed very popular with the growers of lambs for the early market.

According to a high English authority the typical Hampshire should have a "dark face and legs, ears pointed, good foretop, with wool on cheeks, head erect, wide shoulder tops, heavy girth behind the shoulders, well sprung ribs, wide loins, straight quarters, good legs and feet, square and massive form, pink skin, and rich yellow-brown full eyes." It is needless to add that the above description indicates a sheep of very strong character. The Hampshire carries a dense fleece of combing wool, is very docile, having in England been accustomed to close herding

between the hurdles, and in Michigan is run in flocks of 50 to 100 ewes and their lambs.

The Hampshire Association numbers about 100 members. Michigan leads with 23 recorded flocks. New York has 22, Pennsylvania 17, Ohio 8, Iowa 5, Massachusetts and Illinois 4 each, and Indiana, New Jersey and Ontario 3 each, and a number of others have one or two flocks in each state, also a number of high grade flocks. The Association was organized Nov. 14, 1889, and has recorded over 5,200 purebred Hampshires up to and including Vol. IV. of the Flock Record. Hampshires mature early, are generally fully developed at one year to eighteen months old, are fond mothers, good milkers, and very prolific, ewes mostly raising twins and occasionally triplets. During my ten years' experience breeding recorded Hampshires I have never had a ewe refuse to own her lambs.



Weight 161 lbs., fleece 10½ lbs.

Weight 165 lbs., fleece 10 lbs.

YEARLING HAMPSHIRE EWES, OWNED BY J. H. TAFT, MENDON, MICH.

On pasture they scatter about, each one for itself, and when satisfied lie down, the picture of contentment. The breeding flock utilizes the coarse feed of our farm, such as cornstalks, straw and bean pods, and with a daily feed of roots goes through the winter months in the "pink of condition."

J. H. TAFT.

Prairie Castle Stock Farm, Mich.

FLOCKS AND FLEECES.

A. H. Warren, of Clinton County, who went to Ontario recently to purchase Lincolns, writes that ewes are very scarce, and he had to content himself with ewe lambs, of which, however, he secured a fine lot. He also purchased the yearling ram that won first prize at Springfield and St. Louis fairs, and sweepstakes at both places as best ram of any age. There is a great pull for Lincolns this year.

At the recent meeting of the New York State Association of Merino Sheep Breeders the following officers were elected for the coming year: President, Peter Martin, Rush; Vice-President, Chillet Collins, Victor; Secretary and Treasurer, J. Horatio Earle, Skaneateles; Executive Committee, George S. Hickox, Canandaigua; H. Cardenlo Smith, Onondaga; R. M. Lee, South Bloomfield; Pedigree Committee, George F. Martin, Rush; Glen L. Wheeler, Gatesville; C. Victor Wellman, La Grange.

The English papers report that from latest information there is a considerable falling-off in the number of sheep in the British Isles, the decrease amounting to as much as 3,000,000 below the usual number. American mutton, and Australian and Argentina wool are surely going to drive the English farmer out of the sheep industry, except as a producer of pure-bred varieties to improve the flocks of other lands.

The total number of sheep in New Zealand this year is 19,629,602, of which 9,477,535 are credited to the North Island, and 10,152,067 to the South Island. The total shows an increase of 491,109 on the number for 1896. The greatest total recorded is 20,231,829 for 1894; but the present one shows a great advance to have taken place since 1890, when 16,116,113 sheep were returned. The increase has been chiefly in the North Island, where there were only 6,588,346 in 1890.

It is not weight that brings the high price in the mutton market. It is the

shape, condition and finish of the animal. An item in a recent issue of the Buffalo Mercantile Review will show this. It said: "J. A. Smith, of Homer, Mich., an old time and extensive shipper to this market, had a car of prime fat lambs, good enough to bring 6 cents, averaging 85 lbs. The yearling sheep in his load brought \$5.10." On that day the highest price paid for any other lambs in the Buffalo market was \$5.90, and others weighing 10 lbs. more than Mr. Smith's bunch sold 20 cents per hundred less. If there is no export demand heavy sheep and lambs are always slow of sale, and at a low range of values.

Speaking of the changed conditions in the sheep business in New Mexico, ex-Congressman Burkhardt, of Santa Fe, said recently: "I know of several men who went about two years ago begging some one to buy their flocks at 90 cents and \$1 a head, so that they,

of their recent wool clip at \$3,000 and \$5,000 and \$7,500, whereas they get but one-third of those sums in any of the previous five years."

The Kansas City Drovers' Telegram is responsible for the following: Two Klickitat Co., Washington Territory, girls have made over \$5,600 during the past year out of a band of sheep. In November, 1896, the Misses Kenway, residing in Southern Klickitat county, near the Oregon line, invested \$1,840 in a band of sheep, having faith in the advance of wool and general good markets. During last summer they made two sales of wool and sheep, receiving on one occasion \$1,460 and on another \$800. The books in the transaction were closed last week, when the remainder of the sheep brought to the young ladies in cold cash \$5,220. Their profits are \$5,640, which even old sheep men consider first-class returns on their investment. The young women hired an experienced sheep driver to care for their flock last summer, and arranged to sell it before winter feeding became necessary.

The secretary of the New Mexico Sheep Sanitary Board says of sheep husbandry in that territory: "The cattlemen are not the only live stock men who are rolling in clover these days. The sheepmen are grazing delightedly in the other end of the pasture, with lambs 40 to 50 pounds weight as good as gold at \$2 to \$2.50 per head; the matured animal and wool in demand, with a possibility of higher prices. We consider that we are even better fixed than the cattlemen. The improvement in agricultural conditions in New Mexico has developed until her facilities for sheep and wool-growing are unsurpassed. She has at present 55,000,000 acres peculiarly adapted to sheep-growing, and is capable of maintaining 110,000,000 sheep, a number sufficiently large to produce an annual clip of 660,000,000 pounds. The present consumption of the whole country is 660,000,000 pounds, so that New Mexico presents a wide field for developments in the wool-growing industry. Not a great deal of feeding for market is done in New Mexico."



(TRADE MARK.)

CURES RHEUMATISM

AND MANY OTHER DISEASES.

People Who Have Been Cured Say This, and if You Are Suffering and Use "5 DROPS"

You will Say It Cures too.

WHAT ONE GRATEFUL PATIENT WRITES.

DEAR SIR:—About a year ago I had a shock, and my right limb got cold and numb, and quite painful, and there seemed to be but little circulation. After taking "5 DROPS" six weeks there was a creeping sensation, and immediately I found that both limbs were alike warm. I cannot say enough for the great good "5 DROPS" has done for me. I would not be placed back where I was eight weeks ago for any amount of money. I am determined that others shall have the benefit of "5 DROPS." J. H. SWART.

A LETTER FROM A LADY WHO WAS CURED.

GENTLEMEN:—I feel as I ought to return my thanks to you for what your medicine has done for me. I have been a great sufferer since the first part of May last. I was helpless so I could not even dress myself. My brother brought me a bottle of your medicine and I received relief from the first dose. Everyone around here who knows about my case think your remedy truly wonderful. I will always recommend your medicine, and will do all I can to get those who suffer to use it. MRS. ALICE MCNEE

HERE IS A MAN WHO GAVE "5 DROPS" A TRIAL.

GENTLEMEN:—As I have given your "5 DROPS" for rheumatism a trial and found them just as recommended, I hasten to express my gratitude. I was so crippled I could not walk, and in constant pain. Commenced using "5 DROPS" about the 1st of November, and can now walk erect. Everybody that sees me to-day, and saw me ten days ago, say it is wonderful. I cannot speak too highly of the remedy. Yours respectfully, W. W. AHRENS.

"5 DROPS" cures Rheumatism, Sciatica, Neuralgia, Dyspepsia, Backache, Asthma, Hay Fever, Catarrh, Sleeplessness, Nervousness, Nervous and Neuralgic Headaches, Earache, Toothache, Heart Weakness, Croup, Swelling, La Grippe, Malaria, Creeping Numbness. To enable sufferers to give "5 DROPS" at least a trial, we will send a sample bottle, prepaid by mail, for 25 cents. A sample bottle will convince you. Also, large bottles (300 doses) \$1.00, 3 bottles for \$2.50. Not sold by druggists, only by us and our agents. Agents wanted in new territory. Write us to-day.

SWANSON RHEUMATIC CURE CO., 167-169 Dearborn St., CHICAGO, ILL.

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Runs Easy, Lasts Always

And a boy can sow 30 ACRES of land in one day. Sows all Grass Seeds, all Clovers, Alfalfa, Flax, Red Top, Orchard Grass, Millet, etc. Hopper for Wheat, Rye, Oats & Barley. No bother with stakes—just follow drill marks. Weighs 40 lbs. O. E. THOMPSON & SONS, 25 River St., Ypsilanti, Mich.

Catalogue free.

WE SELL DIRECT TO FARMERS.

FARMERS BE WISE, DEAL WITH US AND SAVE 40 PER CENT ON YOUR FERTILIZERS.

You Save Salesman's Expenses and Agent's Profit.

Analysis.	Phos. Acid, Per cent.	Ammonia, Per cent.	Actual Potash, Per cent.	\$22.00 per ton
Pure Raw Bone Meal.....	22 to 25	4 to 5	
Four Fold Fertilizer.....	9 to 10	2 to 3	2 to 3	16.00 "
Smoky City ".....	8 to 10	1½ to 2½	1½ to 2½	15.00 "
Big Bonanza ".....	9 to 10	2½ to 3½	4 to 5	20.00 "
Potato Special ".....	9 to 10	3½ to 4½	6 to 7	23.00 "
Tobacco Special ".....	11 to 12	3 to 4	4 to 5	21.00 "
Bone and Meat.....	13 to 15	4 to 5	18.00 "

For samples and pamphlet, write WALKER STRATMAN & CO. Herr's Island, Pittsburg P.



"ACME" PULVERIZING HARROW & LEVELER

For all soils, all work.

Crushes, cuts, lifts, pulverizes, turns, levels the soil in one operation.

Cast steel and wrought iron—practically indestructible. Cheapest riding harrow on earth. \$8.00 and up.

SENT ON TRIAL.

To be returned at my expense if not satisfactory.

N.B.—I deliver free on board at distributing points.

DUANE H. NASH, Sole M'fr., Millington, New Jersey, and 30 So. Canal St., Chicago.

AGENTS WANTED

Illus. pamphlet mailed free. Mention this paper.

Farmers' Clubs.

CONDUCTED BY A. C. BIRD.

All correspondence for this Department should be addressed to A. C. Bird, Highland, Mich.

OFFICERS OF THE STATE ASSOCIATION OF FARMERS' CLUBS.

President—E. J. Cook, Owosso.
Vice-President—Mrs. E. L. Lockwood, Petersburg.
Secretary-Treasurer—C. M. Pierce, Elva.
Directors—W. H. Howlett, Dansville; C. J. Phelps, Damon; F. M. Whelan, North Newburg; A. L. Landon, Springport; H. Gaunt, Highland; A. P. Greene, Eaton Rapids.
All communications relating to the organization of new clubs should be addressed to C. M. Pierce, Elva, Mich.

FARMERS' MUTUAL INSURANCE COMPANIES.

Among the many attempts of the farmers of this State to establish a business on the co-operative plan, the only one which has withstood the test of years is fire insurance. The large number of farmers' mutual fire insurance companies which have been in successful operation for a score or more of years, demonstrates beyond a doubt that the idea is a practical one. By comparing the reports of the Commissioner of Insurance for a term of years, however, it will be found that the rate of loss in these companies is gradually increasing. This ought not to be. Being true, there must be some practical cause, or causes, which likely may be removed. As business men, the farmers of Michigan should begin the investigation at once, and not cease until the trouble is discovered.

Acting upon these premises we have given much time to a careful and practical study of the question. Our conclusions we propose to publish in editorial column of this department during the next few weeks. In doing this we wish to have it clearly understood that we are but expressing our own opinions, and that the best results can only be obtained from the discussions which these articles may provoke. We especially invite and urge that there be a full and free discussion on the subjects involved.

The time is particularly opportune, since the present Commissioner of Insurance, Hon. Milo D. Campbell, is doing everything in his power to improve existing conditions along these lines. Every man or woman who is carrying either fire or life insurance should help sustain Mr. Campbell in his honest and fearless effort to weed out the worthless companies from the worthy ones; the fraudulent from the honest. The farmers of Michigan can render the Commissioner no greater aid at this time than to discuss these matters freely and fully, with a well defined objective point. And in so doing they will help themselves a hundred fold more than they will the Commissioner.

We shall treat the subject from week to week under the following heads: The Fee System in Mutual Insurance, Indiscrimination in Taking Risks, Insuring Mortgaged Property, Appraising Before Insuring, Re-insuring, Increasing and Decreasing Insurance, Insuring Personal Property. The Conduct of Annual Meetings, Is the Privilege Now Granted Companies of Cutting Down the Insurance After the Loss Occurs Just to the Insured?

THE ASSOCIATION SECRETARY'S ANNUAL REPORT.

In such an organization as the State Association of Farmers' Clubs the president and the secretary present some important and striking differences in the work of their respective offices. The former is concerned with the present, but more so with the future. With him the question is not altogether what the Association is, but what it ought to be. His eye is fixed upon an ideal towards which he directs the course. It is not enough that he does the work which comes to his hand. He is not satisfied with merely carrying out what was aimed at by his predecessor. The close of his official career must show new fields of usefulness to be developed by those who follow.

With the secretary it is different. He lives in the present and not in the future. He is concerned with what is being done and what has been accomplished in the past. He deals with hard facts, not always interesting to others, however much so they may be to himself, yet they are essential. So the report of the secretary, though it may offer few attractions, is necessary to an understanding of the work being done, and affords the only definite basis for judging of the future.

The work of this office during the past year may be placed under three

heads: Obtaining information regarding clubs; Work pertaining to legislation; And the extension of the Association. The three may be treated separately.

CLUB STATISTICS.

At the beginning of the year there were so many inquiries regarding clubs and the work in general that it was thought the time had arrived for the Association to become better acquainted with its members. Accordingly a list of questions was sent out which were usually promptly answered by the clubs, only a few failing to respond. This has been a great assistance to the secretary as it has been a means for obtaining much valuable information.

The names of many clubs unknown to the Association were obtained in response to the inquiry for them, and a majority of these have become members of the State organization after its aims and purposes have been made known to them.

The size of the clubs varies greatly, some reporting less than twenty members, while others claim more than two hundred. The average may be safely placed at sixty, and is probably not less than seventy-five.

The exact number of clubs belonging to the Association cannot be given yet, as many wait till the annual meeting before joining, but there should be more than one hundred. Taking these figures as a basis for an estimate it will be seen that more than 6,000 people are active members of the clubs which belong to the Association.

More than three-fourths of the clubs meet once a month. The others meet fortnightly, once in two months, quarterly, and occasionally a club is found which assembles its members every week.

The average yearly expense ranges from more than a dollar to less than one cent for each member. More than half the clubs find an annual assessment of ten or fifteen cents sufficient for all purposes.

These may seem trivial matters, but inquiries from those who wish to organize clubs show that they are not so considered. It is a common error to suppose that clubs are expensive, and it is always a relief to find that they can be kept up at so small an outlay.

The time in the day for the meeting is important. If held during the afternoon the membership is likely to be selected from a large district, and the older people will usually be in the majority, but if the evening is chosen the club will be limited to a neighborhood and will consist chiefly of the younger people. Of the clubs in the Association not one in six holds meetings in the evening, which is sufficient to indicate what influence is paramount.

THE ASSOCIATION AND THE LEGISLATURE.

The principles adopted at the meeting a year ago and the fight for them last winter call for no more than a mere mention here. They concerned this office but little. However, it may not be out of place to say that when the clubs were officially requested to express themselves to their representatives, both state and national, they did so with a promptness that was gratifying. It was not the intention to become involved in questions of a partisan nature. It made no difference to the Association what stand a club might take regarding the questions, whether for or against them. But it was of the utmost importance that the clubs should understand these questions and present their opinions to the law makers who represented them. As a result, it is now recognized that the clubs understand what is needed by the people and that their voice must be heard.

While the political feature of the clubs has lately attracted most attention it is a mistake to suppose, as some have, that it is the most important. The need for a better social relationship and the desire for the general knowledge to be obtained at well conducted club meetings is a stronger factor in organization than political discussions have been.

CLUB EXTENSION.

The meeting of the Association a year ago and the work with the legislature last winter attracted considerable attention throughout the State, and a strong impetus was given to the club movement, as the frequent inquiries regarding organization showed. How many clubs have been organized during the past year cannot be stated at present, but sixteen of them joined the Association and many more have expressed the intention of doing so. Taking these into consideration it is safe to say that no less than thirty clubs have come into existence since the last annual meeting. Besides these, many of the older clubs have this year united with the State Association.

Some of which have been organized for several years. Isolated as they have been, they have successfully done the work which fell to their lot in their own limited field, but now they see the possibilities for usefulness beyond their narrow circles and find in the Association the means of assisting in the promotion of the club spirit. Thirteen of these have joined this year, making a total of twenty-nine clubs which have come into the State organization since the last meeting.

In some counties the clubs have gone a step farther and have banded themselves together for the purpose of looking after the unorganized territory within their limits. This work has just begun, yet the results are already evident in the way of new clubs, with an excellent promise for the future.

The results this year have been greater than the most sanguine would have predicted, but there is still room for many times the number of clubs now organized. The work of the Association in this direction is little more than begun and should not be completed till there is a strong, active club in every community.

OTHER STATES.

It has been thought best to call the attention of the agricultural press to the Association. Accordingly a letter was addressed to each of these papers, calling attention to the Declaration of Principles which was inclosed. In the majority of cases in which the work of the Association was mentioned it was highly commended, and although less than two months have elapsed several inquiries have been received regarding local clubs. From Utah to New Jersey, and from Minnesota to Alabama, these letters have been received, proving conclusively the great need which exists for this form of organization, while the success of the movement in Michigan shows how well the clubs in this State fill the want.

Michigan was the first to organize a state association, but no longer stands alone. Ohio organized last winter. California, Nebraska, Iowa and Indiana may be expected soon to follow, also other states as soon as clubs become more numerous. This may be justly claimed as the result of the work done by the Michigan State Association of Farmers' Clubs since its organization only four years ago.

This has been a prosperous year for the Association and for the individual clubs. But it must not be forgotten that the chief credit is due to those who have preceded in office. They sowed the seed, and the harvest of this year was inevitable.

FRANK D. WELLS,
Secretary State Association of Farmers' Clubs
for 1897.

REPORTS FROM LOCAL CLUBS.

A NEW CLUB.

At a meeting recently held at the residence of J. B. Wing, near Millington, a Farmers' Club was organized with the following officers in charge for the coming year: President, F. B. Young; vice-president, F. E. Rice; secretary, Mrs. T. J. Rice. The first regular meeting will be held with the president the second Thursday in February.

Tuscola Co. MRS. T. J. RICE, Secy.
HOWELL FARMERS' CLUB.

The Howell Farmers' Club held another successful meeting at the home of T. R. Staley. Miss Norton in an interesting paper on "Political Economy," gave a history of this subject, noting the most prominent economists of past ages and their economic ideas. The settlement of the economic questions of our own day will determine the weal or woe of the nation.

A long discussion on the subject of "State Farmers' Institutes" brought forth varying opinions. Some were opposed to the present system, thinking better results could be secured if the people of the county controlled their own institutes. Others opposed the present system of state appropriations for the same, not because of the extra tax but because it is class legislation. The farmer does not ask alms; all he desires is justice. Others approved the appropriation, claiming that several counties would not hold institutes at all if deprived of this aid.

The question box was full of interest. The question "Are you in favor of the single tax?" was answered in the negative by Miss Norton, her reason being that it would place the burden of taxation on land to the exclusion of bonds, trusts and combines.

The question, "Are you in favor of the speedy payment of every dollar of the bonded debt of the United States?" was answered in the affirmative. "Would you recommend the discussion

of economic questions at farmers' clubs?" was answered emphatically by "yes." Religion and politics should not be excluded. However, they should not be discussed for the purpose of defending preconceived opinions, but for ascertaining the truth.

Delegates to the State convention were instructed to report this club as opposed to any radical change in the road laws, and also as opposed to all unnecessary and extravagant appropriations.

MRS. H. R. SMITH, Cor. Sec.
Livingston Co.

BLISSFIELD FARMERS' CLUB.

The December meeting being the annual meeting, the following officers were elected for the new year: President, Mrs. W. W. Goff; vice-president, J. R. Crane; secretary, Mrs. Ruel Payne; corresponding secretary, Mrs. John Letter; treasurer, W. W. Goff. The club is growing both in membership and interest.

MRS. JOHN LETTER, Cor. Sec.

HOLLY CENTER FARMERS' CLUB.

About forty visitors and members of this club met at the home of Mr. and Mrs. David Mitchell, December 9th.

The first question discussed was the postal savings system. One speaker thought that while it would benefit a certain class it would be injurious to manufacturing and business interests, while others thought it might be used as a political scheme to benefit the government at the expense of the individual. Many, however, thought it would be absolutely safe and a great convenience. "The best methods of feeding and marketing sheep and lambs" was discussed. We should begin feeding lambs as soon as they are weaned or before. Bran and oats mixed with corn as a basis is the best ration for lambs. Rye is also good. The best time to market was thought to be when you could sell to realize a good profit. For the next meeting each member will be expected to either give a recitation, sing a song, tell a story or give a short talk on any subject.

Oakland Co. COR. SEC.
WALLED LAKE CLUB.

At the January meeting this club discussed the question, "Which occupation gives a man the most happiness, that of the farmer, lawyer, merchant or speculator?" The opinion was that a man should follow the occupation best suited to himself and he will most likely be successful; and in being successful will be happy. A story was told of a boy whose father gave him some pigs to care for. They were shut up where he did not necessarily see them, and when his father asked him in the spring how many he had, he said he did not know as he had not seen them. The father was convinced that his son was not adapted to farming.

The club will be entertained at the town hall, Nov. 1, by Mr. and Mrs. A. T. Rice in February.

Oakland Co. EARL E. PHELPS,
Cor. Sec.

PROGRESS CLUB.

About one hundred were present at the January meeting of this club, held with Mr. and Mrs. Albert Whitehead. The question, "Does it pay to keep farm shod horses?" was discussed. The general conclusion was that it does.

"Who works the harder, the husband or the wife?" was discussed, each side having its adherents. The delegates to the State Convention gave their report. The next meeting will be with L. Donaldson, the second Tuesday in February.

F. A. BRADLEY, Sec.

SALEM FARMERS' CLUB.

The prominent feature of the December meeting, held with Wm. Rogers, was a paper entitled, "The Standard of Life," by Rev. Mr. Coffin. This paper was replete with strong points on the tendencies of the age, pointing out the civil and religious dangers to society in the indiscriminate mass of foreigners which is continually coming to our country. It was such a paper as makes more thoughtful men and women of its hearers.

The election of officers resulted as follows: President, Herbert, Smith; vice-president, W. B. Thompson; secretary, Burton Harper; corresponding secretary, C. L. Ross.

There is no diminution either in interest or attendance at our club, and we look forward to a successful year.

C. L. ROSS, Cor. Sec.

MARION FARMERS' CLUB.

One of the largest and most satisfactory meetings of the club held at any time since its organization, assembled at the home of F. W. Munson, Dec. 30th. The program carried out was an excellent one, those who were participants doing their work faithfully and with good effect. The report of the delegates to the State Association meeting at Lansing, was listened

to with close attention. Lack of time at this meeting prevented its discussion.

The rural population has learned to value the advantages which these club meetings offer and when they truly enter into the spirit of a good thing it is sure to prove a success. The Marion Club, in a modest way, is proud of its record thus far and hopes to improve from meeting to meeting until it shall be the ideal farmers' club of the State.

The next meeting will be held at the home of L. K. Beach, Jan. 27th, which, being the annual meeting, a dinner will be served, to which members of all neighboring clubs are cordially invited.

L. I. BROMLEY, Cor. Secy.
Livingston Co.
GENOA FARMERS' CLUB.

One of the most enjoyable meetings of the club was held at the home of J. W. Lawson on January 6th. The music, recitations, etc., were especially fine. The paper, "Life on the farm," by Mrs. H. G. Brush, was requested for publication. The report of L. Fitch, our delegate to State Association, was quite unique. He held the printed program in his hand and gave a minute report of each address, paper, discussion and principal speaker. The next meeting is to be held at the home of A. J. Dunn, Feb. 5th.

MRS. T. J. CONELY, Cor. Secy.
Livingston Co.
SOUTHWEST VERNON FARMERS' CLUB.

This club met Jan. 7th with Mr. and Mrs. Goff. The morning was spent in listening to most excellent and interesting reports from our delegates who attended the State Association at Lansing. As a club we felt well repaid in sending gentlemen who could fill us with such enthusiasm as to almost feel that we, ourselves, were in attendance at that institute.

The following officers were elected for the ensuing six months: President, Frank Clark; vice-president, A. Harrington; secretary, Mrs. F. Clark; corresponding secretary, Martha Van Alstine; treasurer, Mrs. E. Easler.

During the work of the afternoon E. Easler read an interesting paper on "The mistakes and failures of life." W. J. Strong gave a talk on "The benefit of the order."

In the question box were found some excellent questions: What effect would the discussion of politics have on the meeting? Some thought it would be a wise plan to discuss politics occasionally and govern our tempers so that we may hear others give their ideas, and perhaps be profited thereby. Should the farmers form trusts and combines? The majority were opposed to trusts, but thought the time was at hand when it seemed almost necessary for the farmers to form trusts for their own welfare. Some said it would be somewhat difficult for the farmers to combine as they have so many kinds of produce.

The club adjourned to meet with Mr. and Mrs. West in February.

Shiawassee Co. COR. SECY.
ODESSA FARMERS' CLUB.

The January meeting at the home of Mr. and Mrs. Carter was well attended and full of good cheer and interest. The delegates to the State Association gave their reports which proved a feast to all. The paper by Mr. Angst, "How to make sheep husbandry profitable," was well presented and well discussed. The writer said: "One must like the business to be successful in it. Be very exact in feeding and watering. Cleanliness and kindness are very essential. Many good suggestions were made both in the paper and talk which followed.

In the paper read by Mrs. Angst, "How to make housework easier," were many good things: The mother should always remember she is working for loved ones and if the work is appreciated it will lighten the burden somewhat. Plenty of good wood and water handy, and good walks around the house. These, with co-operation in the home, will help wonderfully.

In the talk which followed these good traits were recommended: System, cheerfulness and love. These, with every convenience possible, and above all, good help when needed. "Better pay help than a doctor's bill," was the finale. Our program for 1898 is unique and we very much like the plan of having them printed for the entire year.

Mr. and Mrs. Nye will entertain our next meeting on February 12th.

MRS. P. A. WACHS, Cor. Secy.
Ionia Co.
BLACKMAN AND SANDSTONE FARMERS' CLUB.

The December meeting of the club was held at the home of J. J. Daniels. The following officers were elected for the ensuing year: Pres., S. Z. Crawford; vice-pres., Miss Mary Cochran; sec., Jas. E. Helmer; cor. sec., Abram Avery; treas., Mrs. Charles Hicks. An-

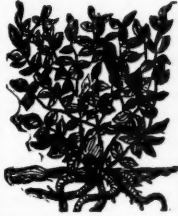
Nature's Cure for the Kidneys and Bladder

AND URIC ACID OR RHEUMATIC CONDITIONS.

THE WONDERFUL KAVA-KAVA SHRUB.

A Free Gift to Every Reader.

A great physician once declared that Nature has provided in the field of Botany a sure Remedy for every disease, if man had the ability to discover it. As disease is the disturbance of some natural function of the



body, so Nature provides a remedy for such disturbance and thus cures the disease. This seems specially true of the late discovery of the Kava-Kava Shrub, or as botanists call it, the *Piper Methysticum*, found on the Ganges river, East India. This wonderful shrub has a peculiar and most beneficent effect upon the human Kidneys in conditions of disease. The Kidneys, as is well known, separate from the blood and cast out through the Urine, certain poisonous matter, such as Uric Acid, Urates, etc., which if retained in the system cause Bright's Disease, Rheumatism, Gout, and other maladies of the Bladder and Urinary Organs. The Kava-Kava Shrub (*Piper Methysticum*) heals the disordered Kidneys, restores them to their natural functions, and eradicates from the Blood the poisons which cause disease in the system. The discovery of the Kava-Kava Shrub, like the discovery of quinine by early Christian missionaries in Peru, was first made by observing the use of the shrub by the natives. Dr. Archibald Hodgson, the great English authority on these diseases, describes the sufferings of both Hindoos and white missionaries and soldiers on these low, marshy swamps and jungles on the Ganges. He says: "Intense tropical heat and moisture acting upon decaying vegetation render these low grounds on the Ganges most unhealthy districts. Jungle fevers and miasma assail the system. * * * The Blood becomes deranged and the Urine thick and dark-colored. * * * Life hangs in the balance. Then when all modern medical science fails, safety is found in the prompt use of Kava-Kava. A decoction of this wonderful botanical growth relieves the Kidneys, the Urine becomes clearer, the fever abates, and recovery sets in," etc.

Of all diseases that afflict mankind, Diseases of the Kidneys are the most fatal and dangerous, and hence the discovery of the Kava-Kava Shrub—Nature's Positive Specific Cure for Diseases of the Kidneys—is welcomed by suffering humanity, and its medical compound Alkavis universally endorsed by the Hospitals and Physicians of Europe.

The well-known American physician, Dr. J. M. S. Thomas, reports that Alkavis promptly and effectively cured four well marked cases of Bright's Disease among his patients, and writes:

"I have fully tested the value of the Kava-Kava Shrub in Kidney, Bladder and Urinary disorders, as well as in Rheumatism and Dropsical Effusions, with the most remarkable and satisfactory success."

In the short time that Alkavis, the Kava-Kava shrub compound, has been before the American public, its cures of various forms of Kidney and Bladder diseases, Rheumatic and Gouty Disorders, have been numbered by the thousands. Alkavis has not been extensively advertised, through newspapers or otherwise, but has made its way entirely on its merits, and through the fact that every sufferer can make free trial of its wonderful curative powers, and judge of its value from personal experience. The records of its extraordinary cures are numbered by hundreds in every part of the country, the following being but a few of the many similar letters daily received.

Rev. W. B. Moore, D.D., of Washington, D. C., Editor of the "Religious World," writes of the wonderful effects of Alkavis. He says:

"For several years I was a sufferer from Kidney troubles, and could obtain no relief from physicians. I used various Kidney remedies but with no success.

I had given up all hopes of ever recovering my health, until hearing of the marvellous cures effected by your Alkavis decided to try same. After the first use thereof I began to experience relief, and following up the treatment was permanently cured. I cheerfully recommend your excellent Alkavis to persons afflicted with Kidney and Rheumatic disorders as the best remedy known.

The venerable Mr. Jos. W. Whitten, of Wolfboro, New Hampshire, at the age of eighty-five, gratefully writes of his cure of Dropsy, swelling of the feet, and Kidney and Bladder diseases by Alkavis. Hon. R. C. Wood, a prominent attorney of Lowell, Indiana, was cured of Chronic Rheumatism, Kidney and Bladder Disease of ten years' standing by Alkavis. Mr. Wood describes himself as being in constant misery, often compelled to rise ten times during the night on account of weakness of the bladder. He was treated by the home physicians without the least benefit, and completely cured in a few weeks by Alkavis.

Mr. J. N. Hood, of Midway, Delaware, was completely cured of Rheumatism, Kidney and Bladder Disease by this wonderful Remedy, and now at seventy-eight is enjoying perfect health.

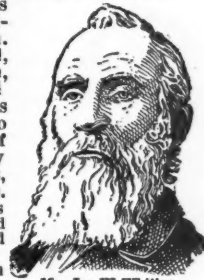
The following letter from the well-known minister, Rev. A. C. Darling, of North Constantia, Oswego County, New York, was written after as he says himself, he had lost confidence in man and medicine, had no sleep or rest, and took Alkavis as a last resort.

Gentlemen:—I have been troubled with kidney and kindred diseases for sixteen years and tried all I could get without relief. Two and a half years ago I was taken with a severe attack of La Grippe which turned to pneumonia. At that time my Liver, Kidneys, Heart and Urinary Organs, all combined in what to me seemed their last attack. My confidence in man and medicine had gone. My hope had vanished and all that was left to me was a dreary life and certain death. At last I heard of Alkavis and as a last resort I commenced taking it. In a short time, to my astonishment, I could sleep all night as soundly as a baby, which I had not done in sixteen years before. What I know it has done for me, I firmly believe it will do for all who will give Alkavis a fair trial. I most gladly recommend Alkavis to all.

Sincerely yours, (REV.) A. C. DARLING.

Mrs. James Young, of Kent, Ohio, writes that she had tried six doctors in vain, that she was about to give up in despair, when she found Alkavis, and was promptly cured of Kidney disease, and restored to health. Mrs. Alice Evans, of Baltimore, Md.; Mrs. Mary A. Layman, of Neel, West Va., twenty years a sufferer; Mrs. Sarah Vunk, of Wolfboro, Pa.; Mrs. L. E. Copeland, Elk River, Minn.; and many other ladies join in testifying to the wonderful curative powers of Alkavis, in various forms of Kidney and allied diseases and in other disorders peculiar to womanhood.

The Church Kidney Cure Company, of No. 409 Fourth Avenue, New York City, so far the only importers, are so anxious to prove the wonderful curative power of the Kava-Kava Shrub, that they will send a Large Case by mail free to Every Reader of THE MICHIGAN FARMER who is a sufferer from any form of Kidney or Bladder disorder, Bright's Disease, Rheumatism, Gravel, Female Complaints and Irregularities or other affliction due to improper action of the Kidneys or Urinary Organs. All readers who are sufferers can send their names and address to the company and they will promptly receive the Large Case by mail free. To prove its wonderful curative power it is sent to you entirely free.



Mr. Jos. W. Whitten, Wolfboro, New Hampshire.



Mrs. James Young, Kent, O.

FREE.

nual reports of secretary and treasurer were heard. The former report showed a membership of 110, an increase of twenty-five during the past year.

The report of Mr. Helmer, delegate to the meeting of the State Association at Lansing, was listened to with much interest. He gave a synopsis of the several addresses he heard, and outlined the future plan and policy of the Association. The report of Mr. Cochran, the other delegate, was necessarily omitted until the next meeting. Mr. and Mrs. N. S. Peterson will entertain the club on January 15.

FLORENCE E. DANIELS, Cor. Secy.
Jackson Co.

TROY FARMERS' CLUB.

The members of the Troy Farmers' Club celebrated New Year's by meeting with Mr. and Mrs. G. P. Jennings. At 12 o'clock a roast turkey dinner was served to the members and their friends, about sixty in all. Our delegate to the State Association, Mr. Perry Jennings, spoke very highly of the Association, giving us many of the good ideas and thoughts suggested by the speakers.

"Shall farmers have free mail delivery?" Mr. Denison opened the discussion, which was carried on in an interesting manner, because so many of the members and guests took part. At the close a vote was taken, which proved that the farmers in Troy think they ought to be entitled to free mail delivery.

After completing the excellent program, including a well written paper by Mrs. H. B. Walters, we all dispersed to meet with Mr. and Mrs. Perry Jennings in February, declaring, as at every meeting, this was the best, and hoping the meetings during the year might prove as pleasant as the first had been.

MRS. G. S. ELLIOTT, Cor. Secy.
Oakland Co.
COLUMBIA FARMERS' CLUB.

The club held its annual meeting at "Welcome Home Farm" with Mr. and Mrs. Jay D. Reed. The following officers were elected for the ensuing year: Pres., C. H. Hewitt; vice-pres., Mrs. M. L. Cary; sec'y, A. R. Palmer; treas., Mrs. Geo. Sanford; Club Reporter, Mrs. Ethlyn T. Clough.

Nearly one hundred members were present to enjoy the chicken pie dinner, which is a feature of the annual meeting, and the fine program rendered.

The subject for discussion, "Our State Institutions—Their Value as Educational Factors," was opened with a paper by C. M. Hess. The paper was

decidedly in favor of the State helping to sustain the institutions of higher education. They were ranked in the following order: U. of M., Normal School, Agricultural College and Michigan Mining School. The value of these agencies, said the paper, is incalculable and far-reaching in the State. We must foster them carefully, for they are the axle about which revolve our prosperity, liberty, health and happiness.

The discussion was opened by M. W. Hess, who thinks it is time that expenses were curtailed and our taxes lessened in this direction. Let those who want higher education pay for it. There was some opposition to the State helping sustain the Mining school but Miss Maude Smith squelched that by saying that twenty-one mine owners pay largely toward the support of this school, that the State appropriation is small, that most of the students are Michigan boys, and that after graduation they find employment in their own State. W. F. Raven expressed himself opposed to the State making appropriations for the support of higher education. Thinks the duty of the State ends with what it does for the common schools.

The next club meeting will be held with Mr. and Mrs. Reed Winchell, the second Saturday in February, with the following subject for discussion: "The practicability of purchasing road machines for the districts."

ETHLYN T. CLOUGH, Club Reporter.

(Ed. The following are the annual State appropriations for the Michigan College of Mines, or Mining School, as formerly called, from 1888 to 1898: \$62,530; \$82,000; \$22,000; \$43,800; \$28,800; \$55,000; \$55,000; \$40,000; \$40,000; \$42,500; \$42,500. The claim that twenty-one individuals largely support the institution is founded upon error.)

MEECH FARMERS' CLUB.

Our club met recently at Frank E. Swan's. Mr. Swan told us he made the most money by breeding Shropshire sheep and fattening cattle. He had lost thirty-six hogs by the supposed hog cholera, but on opening some of them he found worms in the kidneys as the cause of their dying and saved eight by giving a little turpentine in their feed, say a teaspoonful to each pail of swill. He said if the housewife uses soft home-made soap in washing dishes and puts the dishwasher into the swill barrel, this will prevent hog cholera, or destroy worms in their kidneys.

One member believed in drawing out his manure every Saturday and spreading it over the ground that the

rains might wash its richness into the soil, and in early spring much plowing could be done instead of drawing manure, thus getting one's oats or corn crop in earlier.

Another member thought that crop correspondents were a damage to farmers, because the world knew ahead what the future crop of anything would be and speculators could regulate prices accordingly. Some farmers refuse to report their crops to crop correspondents and are angry at any threshers who make any report. He thought the Michigan Farmer ought to enlighten the farmers on this subject.

Another member thought that there ought to be a farmers' club in every school district and that every farmer ought to take The Michigan Farmer in addition to his local paper. He said that there were many farmers to his knowledge who did not take a paper of any kind from one year to another and only got news from hearsay.

GEORGE W. BREWER, Cor. Sec.
INGHAM CO. FENTON AND ARGENTINE FARMERS' CLUB.

This club met January 1 at the residence of George Kelly. This being New Year's day, it had been previously arranged that we have an oyster dinner and the day be given to festivities and a general good time. Nearly 100 persons were present and everyone seemed to enjoy themselves.

J. A. Pratt, delegate to the State Association, was called to the floor to report on the convention. Although he was limited for time he gave us a very clear explanation of the proceedings of the convention by telling us the time spent in the convention and reading and explaining the resolutions offered and passed by the convention. It was decided to give the members of the club the opportunity to discuss the resolutions at some future meeting.

The meeting adjourned to meet with Robert Wright on February 5, at which time we will further discuss the question of Farmers' Institutes. We wish a good attendance to discuss this entertaining as well as very important question. When the company dispersed to their homes they felt they had enjoyed a profitable and interesting New Year's Day.

Genesee Co. EDWIN PRATT, Cor. Sec.
TECUMSEH AND FRANKLIN FARMERS' CLUB.

We met Jan. 23rd, at the home of Hamilton Hoag. The large crowd present enjoyed one of the best clubs of the season.

Lenawee Co. ELSIE UPDIKE, Cor. Sec.

Miscellaneous.

THE NORTH WALK MYSTERY.

BY WILL N. HARBEN.

[Copyright 1897, by Will N. Harben.]
(Continued.)

"Give me that newspaper behind the bed," he grunted as he tugged at the last strap to fasten a buckle.

Dr. Lampkin picked up the paper, and Hendricks took it and spread it out on the bed.

"What did I tell you?" he said. "There's the jagged hole left by the clipping. And, see, the paper is dated yesterday afternoon. Pretty good find for one room. Now for Miss Benton's." "They are all in there," said the doctor. "At least they were when we passed just now."

"I heard them all leave a moment ago," Hendricks told him. "I think they went into the drawing room to take a look at the corpse. It is arranged by this time. The undertaker and his men passed the window just now. We shan't find much in Miss Benton's room, however, for, judging by her looks, she has her share of caution, and she has had time, having been in her room since the inquest, to cover up traces."

Hendricks led his friend from the room. The door of Miss Benton's apartment was locked, but the detective opened it with one of the keys in the chambermaid's bunch. When he and Lampkin were inside, he closed and bolted the door.

"Bed's been tumbled pretty well," he remarked. "but I don't think Miss Benton slept much on it last night. I wonder what she did with her satchel or bag. She has had to take something, and a trunk was out of the question." Hendricks opened the door of a closet.

"Ah!" he exclaimed. "There you are, doctor. There is a bag almost as large as Montcastle's up on that shelf by the bandbox. She packed it, then unpacked it and took the trouble to replace it up there."

"Are you sure?" asked the doctor. "Dead sure." Dr. Lampkin looked incredulous. "I don't quite catch you"—he began.

Hendricks pointed at a white undershirt and nightdress hanging from one of the hooks.

"Those things have never been worn," he said.

"Well, what if they haven't?"

"The creases in 'em show that they have been folded to fit the bag. The wrinkles indicate that they have been compressed considerably."

"Ah!"

"Don't simply say 'Ah!' if you want to talk," said the detective, imitating his friend's tone. "It sounds like applause from the gallery. It's loud, but it means nothing."

"I'm doing my best," was Lampkin's rejoinder.

"Yesterday or last night," pursued Hendricks, "she took the bag down from the shelf, wiped it and packed it. There is the mixture of cobwebs, lint and dust that was on it." Hendricks picked up a soiled towel and exhibited it to his companion. Then he reached up and took the empty bag from the shelf. "See how free from dust it is," he ran on, with a merry chuckle. "I'll bet you a dinner that the bandbox next to it is covered with dust."

"I'll go you," returned Lampkin. "though I know you will win."

Hendricks sneezed as he drew the box from the shelf.

"Che-hoo! There is enough dust to fill the eyes of all the detectives in America, and her ladyship did not utilize it except as an eye opener. She is sharp and cautious, but not enough so to hide her movements."

"Do you think she is concerned in the murder?" asked Lampkin.

"Never formed a positive opinion so early in a game in my life," was the answer. "If I did, I'd follow my opinion's nose into trouble. It is because I am continually drowning that I am able to clutch circumstantial straws. See?"

"Have you found any motive?" questioned the doctor.

"Motive enough, the Lord knows," muttered Hendricks, "too much motive. That's the drawback. Son is heir to big fortune; daughter ditto; man in love with her or her chances and another fellow as mad as blazes at the dead man for usurping his rights, or fancied rights, to certain patents and inventions."

"You mean that Mr. Brooks Allen?"

said Lampkin. "I heard the chief of police talking about his intimacy with old Mr. Benton when I went out to send that telegram. Shall you follow him up?"

"Not till I have cleared this rubbish away," returned the detective, with a perplexed frown. He looked again at the bed in the room. "I wish I really knew if Miss Benton slept in her bed. It has a cold, unused appearance. If she did not, she has tumbled it artistically."

The door latch rattled, and voices were heard outside in the hall.

Hendricks bit his lip and made a boyish grimace of mock alarm. Then he quickly glided to the closet, closed the door and turned the key.

"I declare," sounded Miss Benton's voice. "I believe some one has bolted my door on the inside."

"Perhaps it may be the detective."

Miss Hastings. "He told me he was going to look around the house."

"In my room? How dare—the impertinence! I won't stand!"

"Sh!" interrupted Miss Hastings. "They can hear you."

"I don't care if they do. What right?"

Hendricks stepped to the door, winking over his shoulder at his companion. "The devil is to pay now," he said. "Help me out of it."

Hendricks gave the knob a warning rattle and then slid back the bolt.

"Ah!" he said in a tone of well feigned surprise. "I hope—I sincerely hope we haven't got into any private quarters. I was anxious to confer with my friend over a little matter, and you know, Miss Benton, men never can keep from blundering. Your room, is it not, Miss Hastings?"

"It's mine," replied Miss Benton, getting her breath excitedly. She glanced uneasily at the door of the closet. "You are entirely welcome. You are, of course, welcome to the use of the whole house. I was—was only surprised to find my door bolted, and this affair has unstrung me so that I hardly know what I am doing. You must excuse me if I talk incoherently. Oh, I am almost crazed!"

She sank into a chair and covered her face with her hands.

"Perhaps you ought to take something to steady your nerves," suggested the detective seductively. "You do look worn out and unnerved. Will you permit me to touch your pulse? I used to study medicine. Perhaps I may advise you."

She smiled as if relieved and extended her right wrist.

"I thank you very much. You are very kind."

Dr. Lampkin noticed with surprise that the detective laid his fingers on the veins of her slender wrist with the dexterity of a skilled physician, and then Lampkin held his breath, for Hendricks coolly took his lens from his vest pocket and with it carefully examined Miss Benton's hand.

She started to withdraw it, but he held it with gentle firmness and smiled reassuringly.

"Did you know," he said, "that medical experts can tell the condition of the health from the appearance of the skin under a magnifying glass? Miss Benton, I'll venture to say you haven't taken any strong exercise for two weeks. You'll never be well if you don't give your system a chance to throw off its impurities by perspiration."

"I have been confined to the house since my guests arrived," Miss Benton admitted. "I know I need outdoor exercise badly. Thank you." She withdrew her hand and pulled down her flowing sleeve.

CHAPTER VIII.

Hendricks and Lampkin had just left the presence of the two young ladies and were going toward the drawing room, where a constant stream of people was coming in and going out, when Hendricks nudged his friend in the side and looked up toward the front staircase. Ralph Benton was ascending, sliding his hand on the railing.

"Going to his room," said Hendricks in a whisper. "He has heard of our being in his sister's apartment. We must keep a peeled eye on him. I haven't liked his looks since he swooned on me so beautifully. He's got his sister's disposition to cover up tracks, and if I am not mistaken he is the more expert of the two. We'll loiter here a minute."

"You were searching for powder marks on Miss Benton's wrist just now," remarked Lampkin, with a tone of conviction, as the detective paused and leaned against the wall.

"Exactly. I wasn't trying to make a

mask, you may bet your hat on that."

"How did you know she hadn't washed her hands?"

"I didn't think she had. People never do under great excitement. There was no water in her jug on the washstand or any in the slop jar. Besides, powder stains blown in the skin are hard to obliterate."

"Did you find them?"

"No."

"Then she is innocent of the actual crime."

"If she didn't wear gloves when she pulled the trigger," interrupted Hendricks, with a little laugh. "Come on; time's up. We must surprise that fellow in his room."

Hendricks bounded up the thickly carpeted stairs, taking four steps at a stride. Pausing at Ralph Benton's door, he grasped the knob firmly and turned it without making a sound. Then he pressed against the door steadily.

"Locked," he grunted. The word had scarcely left his lips when his shoulder came against the door with the force of a battering ram. The frail fastenings gave way, and Hendricks almost fell into the room.

Ralph was standing in a corner, holding an envelope over a low turned gas jet.

"I beg pardon!" exclaimed Hendricks. "An accident. I assure you. My foot slipped, and I tumbled against your door. I'm devilish awkward. Hope I haven't done much damage."

"It's all right," stammered the young man. As he spoke the burning envelope went out, and the crisp black remains were blown across the room. "I—I was just trying to clean up some old rubbish in my desk. I suppose you want to look about here. I really have no objection—anything that will help you get at the facts. Of course the whole place is at your disposal."

"Thank you," said Hendricks, stepping between him and the ashes of the envelope. "My friend and myself would like to use your desk. I see materials for writing are here—that is, if it is no intrusion."

Ralph shrugged his shoulders.

"You are quite welcome," he returned, with a defiant, dogged expression.

Hendricks sat down at the desk, picked up a pen and dipped it into the ink well. "Now, doctor," he began. "Thompson said he would take \$4,000 for the corner lot, but would not give me later than tomorrow to decide. Now, I intend to offer him."

Hendricks paused and glanced up at Ralph. "I beg your pardon Mr. Benton, but this is—a little private deal we were about to make, and if you had just as soon"—

"Oh, I'm going!" exclaimed Ralph, a smile and a sneer blending on his handsome face. "I am really sorry if I have intruded on you."

Hendricks seemed to enjoy the situation.

"Call again, Mr. Benton," he laughed. "Sorry we are busy today."

"I like your cheek," remarked Dr. Lampkin when the young man had left the room.

"Sh!" The smile had left Hendricks' face. It was tense and serious. He rose softly, tiptoed to the door, opened it slightly and looked out.

"Can't be too cautious," he remarked as he leaned a chair against the door

to keep it closed. "Yes, I admire my cheek," he went on as he came back to the doctor, "but I like his more. I tell you he's a corker."

"I dropped on to your ruse to get him out of the room," said Lampkin. "I knew of no Thompson or any corner lot."

"Better to do it decently," returned the detective. "Never give 'em a chance to be defiant and tell you to mind your own business. My idea is to keep on friendly terms with the whole lot. It was that fragment I was after." Hendricks pointed to the charred remains of the envelope. "He was burning it as we came up stairs. I could smell it through the crack of the door. That's why I broke in so suddenly."

Hendricks took a sheet of writing-paper from the desk and slid it carefully under the frail, crisp fragment.

"Don't dare to breathe on it," he cautioned as he carried it toward a window. "It will go to pieces like a soap bubble. I was awfully afraid he'd get his foot on it and grind it into atoms."

The detective raised the sheet of paper to his eyes and examined the burned envelope carefully. Lampkin heard him ejaculate something in a tone of disappointment.

"Empty and blank at that!" he muttered. "What could the fellow mean by destroying it?" asked Dr. Lampkin.

The brows of the detective met. He looked about the room, sniffed the air and pointed to a stream of smoke issuing from the room through a crack beneath a window sash.

"He has burned more paper than that," he remarked. "He was all fired quick about it. We did not burst in on him soon enough."

As Hendricks spoke he began to thoroughly search the room.

"Ah, running water!" he exclaimed, going to the hot and cold water basin in a little alcove adjoining the room and looking into it. "Got a match, doctor? It's dark here."

Lampkin struck one and gave it to him. Hendricks held it in the basin and carefully examined the porcelain surface. Suddenly he raised himself.

"Never saw his beat," he said. "The young rascal has absolutely washed the remains of a burned paper into the city sewer. He is now laughing in his sleeve at my maneuvering to get possession of that blank envelope. That's the second time he has done me. I'll keep the count."

"I don't quite like his looks," remarked the doctor. "It seems to me he is trying to cover up something."

Hendricks said nothing, but taking the charred envelope from the desk he laid it exactly on the spot where it had blown from Ralph's hand.

"What's that for?" asked Lampkin.

"It can't aid me to keep it, and when he comes back here and finds it still there he will be thrown off the track. Now we must take a peep at the young fellow's belongings. I don't think he was undressed last night—that is, I am pretty sure he did not take off his shirt and necktie."

"Why?"

"Because a young man of his taste would never wear a black dress bow, such as he has on now, with a business suit of clothes."

(To be continued.)

Wonderful Talking Machine.



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DESCRIPTION: OUR NEW GEN GRAPHOPHONE IS WELL MADE in every respect, has a strong spring motor, with cut gears and pinions, governor and tension screw for regulating the speed, and RUNS TWO PIECES WITH ONE WINDING, has the latest extra loud aluminum re- producer, new style long bearing record mandrel, is lighter and more portable than the old styles; IS EQUIPPED WITH ALL THE LATEST IMPROVEMENTS, and everything considered, it is UNBEA- TANY IN THE LINE OF TALKING MACHINES. There is no limit to the number of pieces that it will play or re- AS DESIRED.

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ANY OLD RESIDENT OF CHICAGO. If you have friends in Chicago, write them to come and examine our graphophone. Address,

SEARS, ROEBUCK & CO., (Inc.) Cheapest Supply House on Earth, Cor. Fulton, Desplantes and Wayman Sts., CHICAGO.

(TO OUR READERS:—This is a wonderful machine, and it is really surprising how it can be sold for so little money.

They are thoroughly reliable and we can guarantee you fair and honest treatment from them.—EDITOR.)

The Dairy.

We have a complete Dairy and Farm Creamery in constant operation on the Experiment Farm at Climax, Mich. This is personally conducted by J. H. Brown. All dairy correspondence should be sent to Climax, Mich.

GUERNSEYS AT THE WORLD'S FAIR.

It is hoped that the results of the Columbian Dairy Test at the World's Fair, in 1893, will not be misjudged by the friends of the Guernseys. However pleasing it might have been to the breeders to see their favorites rank first in all particulars, the conditions of the tests and the difficulty encountered in securing animals for the trial did not warrant it.

With a total of about 6,000 cows, living and dead, in the Register, the Guernsey breeders found themselves seriously hampered in making selections for cows to send to Chicago. The American Guernsey Cattle Club, being a younger organization than either the Jersey or Shorthorn Clubs, they were unable, through lack of sufficient funds, to make as thorough a search for cows as these other organizations, who had salaried agents travelling and selecting animals for the work for several months previous to the opening of the tests. The Guernsey Club was forced to send to Chicago such cows as public spirited breeders were willing to loan for the work. Many of the best Guernseys were not fresh at the proper time, and it is regretted that several were not available through the unwillingness of owners to risk their valuable animals under such conditions as the tests required. When the time came for announcing the twenty-five, the Guernsey Club had but twenty-six available to select from, while the Jerseys had fifty-three. Despite the disadvantageous circumstances, the Guernsey Club deemed it best to be represented, and used all possible means to make a creditable showing.

Particular attention is called to the peculiar rules which were arranged at the meetings where other breeds had influence strong enough to secure them to their advantage. The rules called for the rating of the butter at prices to be determined by the scoring of same, by a jury of three, and fixed the price much higher than that realized by the American farmer. The scale of points upon which the butter was judged was to the detriment of the Guernseys. It consisted of 55 points on flavor, 25 on grain, 10 on solidity, and 10 on color. This gave a total of 35 points on grain and solidity, shutting out salt, which was claimed to be governed by the skill of the butter-maker. That this is true to a large extent we will not question. At the same time, judging from the high score of the Guernsey butter on flavor, and that the butter being less solid dissolved the salt more evenly, it is believed it would have received higher commendation had it been submitted to the jury on that point.

The thirty-five points on grain and solidity are more than is common in scale of points usually used in judging butter. This gave the Jerseys an advantage. On this point the faulty construction of the dairy house was a great drawback to the softer butters. The glass roof admitted the heat to such an extent that it was impossible to hold the temperature at a point conducive to high quality of butter. On the other hand, the high natural color of the Guernsey butter was marked, but in none of the rules was natural color given any credit over that artificially colored. The Guernseys could not receive a just scoring on same, as the rules allowed coloring matter to be used at the discretion of the superintendents of the breeds competing. This allowed the other breeds to artificially imitate the natural color of Guernsey butter, depriving this test of any value, while admitting the superiority of Guernseys in this particular.

All these helped give the Jerseys a higher score, and consequently greater price for their butter, when in the open market it would not have sold any higher; the price being so much greater than that received by the farmers in the open market, that a small fraction of a pound would make a perceptible money difference and pay for considerable feed.

It should be noted by all friends of the Guernseys that on flavor the Guernsey butter was ahead, and would have had much advantage on color, but for the unfortunate rules.

The rules also called for charging or

crediting the cows with their gain or loss of live weight. This is something the intelligent farmer knows is never taken into consideration in their business. It should have never been made one of the conditions of the contest. It allowed the feeders to fatten their animals, and receive pay for the extra feed the animal received, yet did not convert into dairy products.

THE RESULTS.

The results of the tests bear several interpretations. All that has been written comes from partisan sources. There is little doubt that the Jerseys as a breed rank first according to the rules for the conduct of the test. The Guernseys follow. If the rules are thrown aside, and the data discussed under the conditions the dairymen of the country are placed and come in everyday contact with, the results are changed. In the cheese work, the Guernseys have the two leading cows. In the butter test, they are represented by two and three of the best five cows of any breed.



PITTSFIELD PRINCE 4706 A. G. C. C.

In cost per pound of products the Guernsey won, as is seen by the following:

	Guernsey.	Jersey.	Shorthorn.
1st Test Cheese,	6.74 cts.	6.76 cts.	11.31 cts.
2d Test Butter,	13.4 "	13.3 "	15.9 "
3d Test Butter,	12.8 "	13.3 "	15.8 "
Aver. for Butter,	13.1 "	13.3 "	15.85 "

The Chicago test has dismissed into history the enormous tests made so public in the past. The Guernsey has met her cousins in such a manner that the work points out to the dairyman that the dairy cow is an individual, and that the Guernseys and the Jerseys both contain such animals, and rightly claim superiority as dairy breeds.

Twice have the Guernseys produced butter at a least cost in trials at the experiment stations under equal conditions. Here at Chicago she divided the first place with her neighbor, and beat her on cost of butter and cheese per pound.

Not in the least is it to be regretted that the breed entered the contest. By so doing, they have made friends and received public attention that will be beneficial in the future.

Agreeing with this work at Chicago, we find in the reports of the Director of the New York Station the results of trials during two periods of lactation of several of the dairy breeds, where the result shows the following:

	1st Period.	2d Period.
Guernsey,	18.4 cts.	15.6 cts.
Jersey,	20.0 "	15.5 "
Devon,	23.0 "	19.0 "
Ayrshire,	24.3 "	24.8 "
Am. Holderness,	26.3 "	22.8 "
Holstein Friesian,	26.3 "	26.4 "

	New Jersey.	World's Fair.
Guernsey,	15.3 cts.	13.1 cts.
Jersey,	17.9 "	13.3 "
Ayrshire,	20.6 "	
Shorthorn,	20.8 "	15.5 "
Holstein,	22.4 "	

These records seem to show conclusively that the Guernsey and the Jersey are the leading breeds for butter production, and we feel will bear out our claim that the Guernseys produced more cream and made more profit in selling cream than any of the other breeds. It is truly said that the Guernsey has but to be tried to be appreciated. Another advantage of the Guernsey cow is in the size of her calves. The farmer who desires to improve his dairy animals by crossing will select the Guernsey bull. The calves will have greater size and be more profitably turned into veal, or if raised, will take from the potency of the Guernsey the marvelous richness of the breed. All that is needed to popularize the Guernsey cow among practical farmers in any section is the possession of a single herd. A few visits and careful watching of such a herd will convince all dairymen of the value of Guernseys.

(In response to inquiry we give the above concerning the Guernseys at the World's Fair at Chicago. It is taken from the "Guernsey Breeders' Year Book for 1897." In a future

issue space will be accorded the Jerseys from the Jersey Breeders' standpoint.—Ed.)

A YOUNG GUERNSEY BULL.

This is a good picture of a representative yearling bull of this breed. The Guernsey and Jersey cattle are well known the world over as the special and unexcelled butter making breeds. The Guernsey is somewhat larger than the Jersey, gives possibly a little larger quantity of milk, and nearly as rich in quality.

DOESN'T PAY TO EXPORT IT.

Opinions are divided in England about pasteurization. Some think it an improvement, because thereby the harmful bacteria and the fungi in the milk have been destroyed, thus making the butter purer and increasing its keeping properties. Others again think that the flavor of the butter is partly lost by the process, and, therefore, prefer butter made from

process has been too limited; but we feel sure it will require strong efforts on the part of the sellers to educate the consumers to taking pasteurized butter at a premium over other goods. Unless there is some inducement to pasteurize their cream, we can't consistently ask them to do so.

The shipments we have made consisted of pasteurized cream butter from the Albert Lea, Minn., creamery, and butter made from unpasteurized cream from Iowa. The proportion of the former to the latter in the lot was about one-sixth, and, as we are advised, the entire lots were disposed of to one buyer at one price. The actual worth of the pasteurized butter was perhaps not revealed. It is, therefore, difficult for us to say whether or not the price was influenced by pasteurized cream butter. We are, however, advised that the consuming public on the other side of the Atlantic do not ask for pasteurized cream butter, nor are they willing to pay a premium for the goods. As pasteurized butter is new to them, it is fair to assume that at the present time it hardly pays to go to the expense of pasteurizing the cream.—New York Produce Review.

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The Magician.



The magician of the dairy is the **SAFETY HAND SEPARATOR.**

It improves the quality of your butter and increases the quantity. It doubles the value of the skim milk and vastly increases the value of the herd. In fact this "magician" is the most profitable piece of machinery you can place on the farm.

P. M. SHARPLES,

West Chester, Pa., Elgin, Ill.,
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It's because you don't cure it with **ST. JACOBS OIL**, which penetrates to the seat of the pain and subdues, soothes, cures.

Elgin System of Creameries

It will pay you to investigate our plans and visit our factories, if you are contemplating building a Creamery or Cheese Factory. All supplies furnished at lowest prices. Correspondence solicited.

A MODEL CREAMERY OF THE TRUE SYSTEM

True Dairy Supply Company,

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Contractors and builders of Butter and Cheese Factories, Manufacturers and Dealers in Supplies. Or write

R. E. STURGIS, General Manager of Western Office, Allegan, Mich.

It's Up-to-date

in fact, it is practically a twentieth century production! It is as much superior to every other separator in the market as the electric light is to the tallow candle. It separates the cream completely, does it quickly, cheaply, and is cleaned easily, and easily operated.



THE IMPROVED UNITED STATES SEPARATOR

has come out of every comparative test with the highest honors. No other separator has gained so many endorsements from high sources, or stands so high at the present day in the opinions of dairymen throughout the country.

Some concerns which manufacture machines which they call separators will "shriek" cautions and advice in your ear if you will listen, but you can learn the truth from our catalogue, sent FREE.

Write for catalogues and further particulars.

VERMONT FARM MACHINE CO., Bellows Falls, Vt.

THE MICHIGAN FARMER

—AND—
State Journal of Agriculture.

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The following discounts will be made on orders sent at one time for one advertiser, amounting to \$20 or over, to be completed within one year:

On \$20 and under \$50.....	5 per cent.
" 50 " " 100.....	10 " "
" 100 " " 200.....	15 " "
" 200 " " 300.....	20 " "
" 300 and over.....	25 " "

No deviation from above rates.

DETROIT, SATURDAY, JAN. 22, 1898

This paper is entered at the Detroit Postoffice as second class matter.

State Senator Wilson, of Iowa, has introduced into the legislature of that state, a bill providing that public school books be printed and bound in the state penitentiary. The bill will meet with the combined opposition of the school-book trust and the typographical union.

Representative Belknap has introduced a bill into Congress, which provides for a tariff of 50 per cent, in addition to present rates, on the more important products sent to this country by such foreign nations as discriminate against American pork, canned beef and lard. This is the only sure means of bringing foreign governments, especially those of France and Germany, to terms, and insuring fair treatment to American exporters.

Invitations have been sent out to the boards of supervisors in this State to meet in convention in Lansing to consider some method for the reduction of constables' fees for arresting tramps. This has become a public scandal, and the central counties of the State are robbed of hundreds of dollars every year under the tramp law. Not only that, but any stranger is liable to be placed under arrest, and jailed, if without means, no matter how reputable a citizen he may be. A man looking for work is frequently made the victim of the thrift of these constables. Justices of the peace have also been shown to be in collusion with them in the nefarious business. A law which will put an end to such a disgraceful state of affairs is loudly demanded.

The case of O. W. Shipman, of this city, against the State Live Stock Sanitary Commission to recover damages for the destruction of his dairy herd, affected with tuberculosis, has been decided against him by the Supreme Court. Mr. Shipman had a herd of 30 head of cows, which the Commission, after a test with tuberculin, declared to be tuberculous. They were slaughtered, and the owner offered \$1 per head as compensation. He refused to accept this, and applied to the Supreme Court for a mandamus to compel the payment of the market value of the cattle. The court sustained the position of the Commission at all points. Other parties were awaiting the result of Mr. Shipman's action before beginning suits against the Commission, but this decision will probably end all legal complications.

NEW ENGLAND'S ABANDONED FARMS.

The prophets of evil are greatly consoled by finding that farming in the New England States has become unprofitable, and that a large number of farms have passed out of cultivation and are growing up to brush and weeds. These facts are seized upon and used as arguments to support the theory that the older States are in their decadence, and that this condition is steadily growing. If these Jeremiahs would seek the causes which led to the conditions they bewail, it might soothe their perturbed spirits, and convince them that the section of the Union to which they are becoming like unto Nineveh or Babylon for several generations at least.

The abandonment of farms in New England may be attributed to two causes—Improved transportation facilities and cheap western lands. Ambitious young men, and New England has produced more of them than any other section of the Union, saw greater opportunities in the unpeopled West than in the thickly populated eastern states. The lands were fertile and very cheap. These young men started west, and left the old men and less ambitious young ones on the old homesteads. Those who remained behind were induced to move into the cities and villages, or driven off the farms by the cheapness of western products. Soon the Middle States became the East and the West had reached the Rocky mountains. Even that barrier could not stop the flood, and it is the Pacific slope states that are now the West. Here, however, the tide must stop. These states will gradually fill up, the more western ones the sooner because the ultimate point reached. Then the tide will turn, and gradually fill in the middle western states, and soon begin to affect those on the Atlantic coast. The abandoned farms of New England and other eastern states will again pass into cultivation, because of their cheapness, and emigrants will be as likely to seek Plymouth Rock as the Golden Gate.

Unoccupied land will always be a most desirable thing for the Union and its citizens, no matter whether it is east or west. It means that the growth of the nation can continue, and that opportunities are still awaiting the ambitious and enterprising. While abandoned farms in any section may give evidence of lack of thrift or inability to compete with newer sections, there is nothing to mourn over when we take a look into the future and anticipate a time when the great West will offer fewer opportunities, and the ambitious will turn to the East as a section which has been too long neglected. The great grandchildren of the men who abandoned the farms of New England will yet be tilling the soil first broken by the pilgrim fathers.

The value of good dairy cows is brought out prominently in some figures published by the Michigan Condensed Milk Co., of Lansing and Howell. In the week ending December 25th, 786,353 lbs. of milk were received at these two factories. The price of milk for the coming three months is announced as follows: January, \$1.20 per 100 lbs.; February, \$1.20 per 100 lbs.; March, \$1.10 per 100 lbs. With a few good cows the farmer within reach of these factories has a profitable business at his command, and one which will not run down his land while filling his pocket-book. That the farmers patronizing these factories are well pleased with the results, is shown by the following resolution adopted at the January meeting of the Dairymen's Association, and published in the Howell papers:

Resolved, That the Livingston County Dairymen's Association extend a vote of thanks to the Michigan Con-

densed Milk Company for having advanced the price of milk to the extent of present prices.

The average price paid at these factories for milk during the last 11 years was \$1 per 100 lbs. The amount of cash paid farmers for milk during 1897 was \$351,580.29. During the year 889 carloads of condensed milk were shipped out.

CHANGING CONDITIONS IN MANUFACTURING.

The strike of 10,000 operatives in the New England States the past week is the logical result of changing conditions in the manufacture of cotton goods. The crown of supremacy which New England has held on this continent for three-quarters of a century, as the manufacturing center of the Union in textile fabrics, is threatened by the growth of cotton manufacturing in the South. The latter states have two very important points in their favor: cheap labor, and proximity to the raw material. The Southern laborer, having fewer wants and less ambition than his northern competitor, can afford to work cheaper. Then raw cotton is grown near the Southern cotton mill, and does not have to be transported 1,500 or 2,000 miles before it reaches the point of manufacture. These conditions give the South such advantages that, with fair business management and an undisturbed industrial situation, nothing can prevent the bulk of cotton manufacturing being transferred to the cotton states. Northern manufacturers, to sustain themselves, are attempting to cut down the wages of their employees. Such relief would be only temporary at best, as the natural advantages of the cotton states are too great to enable northern manufacturers to long withstand them. Whether the men win in their fight to maintain the rate of wages, or the manufacturers are successful in securing the acceptance of the rate they offer, the end will be the same. It may be put off for a time by such expedients, but the final result is inevitable.

It is a repetition of the movement which transferred the milling industry from the Genesee Valley to Minneapolis, the center of the great wheat fields of the Northwest. Nothing could have prevented this under then existing circumstances, and nothing can prevent the transferring of the cotton factories, or most of them, to the cotton states.

We think another change in industrial conditions will take place with the growth of wool production in the West, and that is the moving of many woolen mills, and the building of new ones, near the center of greatest production. We look for some point along the Mississippi river to become a great center for the production of woolen goods. The only thing that will stop this is to discourage the production of domestic wools. With no duty upon foreign wools, and the bulk of the amount required imported from abroad, the Atlantic States would hold the strongest position, and probably be able to maintain their present ascendancy. With reduced importations and a greater reliance upon domestic wools, the difference in cost of transportation will be overwhelmingly in favor of the West. The wools of the West are now transported from 1,000 to 2,500 miles. Each pound only represents half a pound of scoured wool. Thus the manufacturer pays freight, or rather the wool-grower does, upon two pounds of wool, to get one to the manufacturer. Then the goods have to be shipped back over the same immense distance before they reach the consumer. Such methods are too costly in this era of close competition, and we think the manufacturing of woollens will as surely center in the

West, as cotton manufacturing in the South. And it will not be many years before the change begins to take place.

GOVERNMENT OWNERSHIP NOT ALWAYS SATISFACTORY.

While the question of government ownership of railways, telegraphs, and other public enterprises is under discussion, a stray fact of how the system works in actual practice is worth bushels of arguments for or against the policy. The whole telegraph system of Great Britain is in the hands of the government, and we commend to interested parties on both sides of the question the following from the editorial columns of the Newcastle (Eng.) Chronicle:

"We feel sure that we shall have with us everybody who is compelled to have recourse to all extensively to this branch of the postal service when we assert that during the past few months the telegraphic system, which has for years been going from bad to worse, has ceased to be either a rapid or an accurate method of communication. Last week a message dispatched to us from London at 8 a. m. reached us shortly after midnight. On Monday a portion of our parliamentary report was sent off, as the postoffice's own coding proves, at twelve minutes after midnight—an hour when, one would naturally suppose, the wires are clear, and delay, unless intentionally caused, almost impossible. The message was delivered at twenty minutes to four. Indeed, it would seem that between three and four hours, or not a great deal more than is required for an express train to cover the distance, is the time needed to transmit a telegram between Newcastle and London. The House of Commons adjourned yesterday morning at 12:57 a. m. Our representative in the reporters' gallery, advised us of the fact in a telegram dispatched at 12:59. His message, which consisted of four words, was delivered at 3:30. An adequate notion of the condition in which telegrams are received, could be conveyed only by printing them verb. et lit.; and our readers may accept our assurance, if assurance is needful, that, were they so printed, in a large number of instances, they would be quite decipherable. The person who intrusts the postoffice with a telegram never knows when it will be delivered, or how it will be delivered, or whether it will be delivered at all. All he can feel reasonably sure about is that his message will reach its destination, if it does reach it, bearing information exactly opposite of that which it was intended to convey. And for this he is charged considerably more than he had to pay seven-and-twenty years ago."

Certainly that is not a very good showing for a government operated telegraph system, and the worst of it is those who suffer have no redress. If it was a private corporation it could be sued for damages caused by its remissness in carrying out its contract with a patron; but you can't sue the government. Any loss it causes must be accepted without a chance of recoupment. And the parties running the telegraphic system in Great Britain are there for life, or until a revolution or an earthquake disturbs their grip on the positions.

We believe the public is better served where rivals are obliged to compete for business, which can only be retained so long as their patrons receive good treatment, and the business is done at a small margin of profit.

In reporting the change in Rule 11 of the rules of the Michigan Merino Sheep Breeders' Association, regarding the registration of rams bred by parties not members of the association, the fee was printed as \$5. It should have been \$1.

A COUGH SHOULD NOT BE NEGLECTED. "Brown's Bronchial Troches" are a simple remedy and give immediate relief. Avoid imitations.

We wish to call the attention of our readers to the advertisement of the Advance Fence Company of Peoria, Ill., which appears in another column of this issue. These people are manufacturing a very desirable, smooth, interwoven wire fence and as they have never before advertised before our readers we wish to bespeak for them honest and friendly consideration at your hands. If you are needing any wire fencing this spring you may find it to your interest to write them for circulars and prices. We note from their advertising matter that they sell only direct to the farmer and pay the freight which offers many advantages.

The Perfect Food for Poultry.

Nothing is equal to green cut bone as a food for hens, and as a means for increasing their yield of eggs. It must be cut fresh daily and fed to the poultry while fresh, and for this reason it cannot be bought like other poultry foods. A very satisfactory and economical way to obtain it is with a Mann Green Bone Cutter which cuts the hardest green bone and gristle finely and evenly. These machines are of various capacities, from the small hand power cutter, up to a 12-horse power cutter. They are made by the F. W. Mann Company, Milford, Mass., and are sold for cash or by installments. All the machines are strong, substantial and thoroughly well made. The makers send their catalogue free.

PILES permanently cured, bleeding, itching or protruding, no failures, sample free. **Hermit Remedy Co.,** Dept. B, 187 Dearborn St., Chicago.

The Household.

CONDUCTED BY MRS. ELLA E. ROCKWOOD.

We should be pleased to have any of our readers who take an interest in household topics, send in their views and opinions upon any subject which is under discussion, or which they wish discussed. The invitation is general, and we hope to see it accepted by many. Address all letters for The Household to Mrs. Ella E. Rockwood, Flint, Mich.

THE CHILDREN UP IN HEAVEN.

"There's a dear little girl coming home to-day!
Oh, what do you think the angels say?"
Said the children up in heaven;
"There's a dear little girl coming home to-day!
She's almost ready to fly away
From the earth we used to live in.
"Let's go and open the gates of pearl,
Open them wide for the new little girl,"
Said the children up in heaven.
"God wanted her here where his little ones meet,"
Said the children up in heaven.
"She shall play with us in the golden street;
She has grown too fair, she has grown too sweet,
For the earth we used to live in;
She needs the sunshine—this dear little girl—
That glids this side of the gates of pearl,"
Said the children up in heaven.
"So the King called down from the angels' dome,"
Said the children up in heaven,
"My little darling, arise and come,
To the place prepared in thy Father's home,
To the home that my children live in.
Let's go and watch at the gates of pearl,
Ready to welcome the new little girl,"
Said the children up in heaven.
"Far down on the earth do you hear them weep?"
Said the children up in heaven.
"For the dear little girl has gone to sleep!
The shadows fall and the night-clouds sweep
O'er the earth we used to live in;
But we'll go and open the gates of pearl;
Oh! why do they weep for their dear little girl?"
Said the children up in heaven.
"Fly with her quick, O, angel dear!"
Said the children up in heaven.
"See, she is coming! Look there! Look there!
At the Jasper light on her sunny hair!
Where the veiling clouds are riven.
Ah! hush! hush! hush! all the swift wings fur!
For the King himself at the gates of pearl
Is taking her hand—dear, tired little girl—
And leading her into heaven!"

HOME CHATS WITH FARMERS' WIVES.

OUTING FLANNEL.

Nothing of equal price can be found among the fabrics of to-day to compare in general utility with outing flannel. It is most useful in a number of ways; from baby to grandsire all may share in the comfort to be derived from wearing it. As night robes for old and young it is most valuable during cold weather and at a cost which places it within the reach of the slenderest purse. For this use the heavier quality is not particularly desirable, since the lighter weights are plenty warm enough without being so heavy to handle when they are to be washed. For five or six cents a yard outing flannel plenty good enough for this purpose may be obtained. Seven yards is ample for such a garment for a grown person. Colors which will bear acquaintance with the washtub should be selected. Faint tones and shades are apt to disappear after a while, and it is well to think of this in making a choice of colors.

The actual comfort conveyed by such a night robe on a cold winter's night is not to be estimated. Even in a warm room every touch of cotton or linen makes one shiver, while the outing cloth is almost as warm to the touch as wool. Every little child, every thin-blooded old person should have these warm, comfortable garments.

Everybody may not be able to have woolen blankets to sleep in, but surely nearly everybody can afford a pair of outing flannel blankets and these are as far superior to cotton sheets on a cold night as rose blankets are ahead of the outing. A pair of the latter, costing 49 cents in most of the interior towns of the State, will wear two winters nicely, and if care be observed in washing them the colors do not fade badly. They should be washed in warm, not hot water, containing some soap, rinsed and at once hung to dry.

One desirable feature of this goods is that it requires little ironing, and, indeed, none at all if dried where there is a breeze stirring. The woolly look is partially destroyed by pressure with a hot iron. This fact commends the outing to busy housewives, or those with little children. One mother

makes full drawers of this for her girls, to be worn over the regular under-garments. Make with elastic below the knee or with a band to be buttoned. Thus made they take the place of an extra skirt and are very much warmer.

Outing flannel washes so easily when soiled that one scarcely dreads cleansing it, and this is one of its good points, too. Anything of a close, firm texture like percale or gingham requires much more rubbing than does the outing. For men's shirts and small boys' waists it is excellent and many mothers make use of it for dresses for the little girls and school waists for the older ones. Some of these are quite pretty.

The cheaper grades in plain white or cream make excellent napkins for young children and many mothers use them entirely in cold weather. They wear well and wash easily, requiring no ironing.

In fact this cheap and popular fabric is a boon to womankind, particularly that class of womankind who must count their pennies and make every dollar go as far as possible.

SOMETHING MORE ABOUT CLUBS FOR WOMEN.

Some weeks ago one of the sisters in the Household asked for some one to write about societies and clubs, and I will give a brief history of a little neighborhood society, of which I am a member. It was organized seven years ago this month (January). Up to that time I had hardly known my neighbors, the most of them at least. This is the way the society was started:

An invitation came to me one day to take tea with one of the ladies near by and meet some of the other ladies of the neighborhood. I accepted, and went. The advisability of organizing a society was considered, and by-laws and constitution were drawn up. Among the things contained therein was this: There was to be no gossip. This has been carried out to the letter, and it is truly refreshing to go out with a company of friends and spend the whole afternoon and hear no back-biting.

We meet once a month at the home of some member, where we work together and take tea. The work is making or repairing clothing for poor children, or making quilts to give away, or perhaps sell and use the money to buy material to make up. Our fees are small enough so that no one need feel that she can't afford to belong, and the social part of it is exceedingly pleasant. We are like a band of sisters, and once each year we take our families and go for a picnic.

As the winter evenings grow long we have chicken pie socials and oyster suppers, at which time all the husbands and children take part. These, too, are a sort of picnic affairs and very enjoyable. The society had twelve charter members, and membership is limited.

A club has since been organized which is open to the entire district, and is wholly literary and social. We have one of the State traveling libraries, and meet once each month at one of the homes and read and study together. This club has a small fee with which to pay its expenses. We take several periodicals, which are passed around from one to another; each one keeps it so many days, then puts her name and date in it and sends it on to the one nearest her. Occasionally the club meets in a social way, and then the families are all invited.

(This gives us ideas concerning two different kinds of clubs, and either is good. Personally, we prefer the latter for farmers' wives, because they have plenty of sewing and too little reading at home.—Ed.)

THE OLD YEAR AND THE NEW.

The old year is gone with its joys and its sorrows, its mistakes and its failures. I wonder how many there are among us who will profit in the coming year by the mistakes we have made in the past? At the going out of the old year and coming in of the new these words come forcibly to my mind:

"Though the world smiles on you blandly,
Let your friends be choice and few,
Choose your course, pursue it grandly,
And achieve what you pursue."

We mothers, with a family of little ones, know just what our course the coming year will be. We will go on in the same old way, doing for others such homely duties day by day. There are so many steps to take each day for

those depending upon us. How much patience we need, more, sometimes, than we really possess. Can we then pursue our way without a hasty word or a frown?

How different from ours is the course of some others. They enter college, graduate with high honors, choose their course and in a short time achieve wonders. Do you think I am complaining because my lot is not a more brilliant one? Do you think I shirk my humble duties? No matter is it where our lot may be cast, if we perform each duty faithfully and well, when the end is near, what a grand recompense it will be to you and to me, if we can say, "I have done my best. I never turned aside from any of the responsibilities that were put upon me."

Shall we let our friends be choice and few? I should like to know and feel that my friends were many, but to gain friends we should be friendly and practice no deception. Falseness is soon found out. I like my friends to be frank and open-hearted and when a friend comes to us and tells us something in confidence, let us respect that confidence and not repeat it to another through the love of gossip.

Some way to-day my thoughts persist in traveling backward. I have found myself thinking many times of old schoolmates and friends. I can account for this only in this way: I chanced to pick up my autograph album, presented to me by a friend in the year 1880, and as I read what has been written on its pages voices seem to come back to me from the past. I prize this little book very highly because many who have written kind and friendly words within have long been sleeping in their last resting place, and today the snow lies like a white mantle above them. Others are far away, while still others who have written therein are living near me. My thoughts grow sad as I think of the many changes that have taken place since then and of the many friends that have gone before. I close, by wishing all who read this A Happy New Year, and may the coming years bring to you all new joys and fresh pleasures.

MRS. A. DO.

HOW MRS. MAC SPENT HER SUMMER.

I spent a very pleasant summer without much trouble or expense. We had a number of little excursions to the near-by resorts, where nature exists in all her primeval grandeur, where a few moments' ride in a bonnie steamer, or row boat will take you to scenes of rocks and hills as wild and grand as those described by Scott in his peerless "Lady of the Lake." It would not take much imagination to people those hills with Sir Roderick's brave clan, and to believe we had stepped out of this prosaic age back to the grandeur of the earlier centuries. Long may those hills and rocks be preserved in all their beauty.

I suppose some would think I had spent a very hard, dull summer, similar to those described as driving farmers' wives insane, but I have managed to sandwich much brightness in between cooking, churning, gardening, chicken raising and such occupations. I have made the acquaintance of a number of George Elliot's matchless creations, and I have added many others to my list of thought friends. I spent many hours traveling in very gallant company, and when the good clock brought me safely home again in time to get supper and skim the milk, feed calves and chickens, I was much refreshed by my hours in the hammock and the varied scenes my mental self had been visiting.

While I would enjoy traveling, I sometimes think it is a greater pleasure to sit in an easy chair or lie in a hammock and send ourselves abroad unencumbered by that luggage known as the body, which demands so much care and attention. And then the economy of it! We can enjoy the

beauty seen by the tourist, and also look after the welfare of our own little domain. What a great blessing this power to enjoy and appreciate good reading is, and it is something every child should be encouraged to cultivate. The person who reads much is never lonely, the whole world is their garden, where they may gather flowers from the Alps or inhale the perfume of the sweet lilies of India. They may spend days at the Queen's court, or travel in the wilds of darkest Africa. The sun never sets on their horizon. When we see the small circle which surrounds the person who does not read much we need not wonder why the affairs of their friends or neighbors seems to occupy so much of their attention. I say, encourage children to form a taste for reading before they enter that period where frivolous amusement seems to occupy their time and mind, which is so soon followed by that hard, practical age which crowds out the highest and brightest of our nature. The individual who has learned to love good reading while young will never be so busy that he cannot find time for a few moments with his chosen friends, and the beauty of it is that though our hands may be chained to labor our real selves may roam and feast with the noblest of all ages. I am quite sure the man or woman that loves to read stands the trials and hard struggles of life better than the one who is narrowed down to the mere drudgery of work, with no bright glimpses of the great world around us. So I say encourage the young to read, that they may adorn the chambers of the mind with beautiful pictures and noble thoughts that will add to their enjoyment through all ages.

MRS. MAC.

USE OF SALT IN BATHING.

Trained Motherhood tells us that an effect of renewed life and freshness is at once felt after using the salt rub.

To prepare this take a few pounds of coarse salt, sea salt by preference, and wet it to a slush with water. Take this wet salt up in handfuls and rub the entire person briskly. Then dash on clear water, cold if one can stand it, and rub briskly with a dry towel. This is said to be excellent for the complexion as well as for the general health.

For young children it is best to drain off the salt and add two tablespoonfuls of bay rum to sufficient water for the bath. Too much salt in the water might irritate the tender skin of young children.

FROM THE FAR WEST.

A personal letter from A. H. J. announces the safe arrival of herself, husband and children at their new home in the far west. They are located at Oregon City.

She writes: "There are roses upon the table freshly gathered; the grass is green, and beneath the moss-covered trees are good apples. From my window I can see the silvery Willamette winding through the valley and boats tracing its course. It rains nearly all the time at this season, but when it does stop everything is lovely. When I think that it takes a week for a letter to reach us, I realize how far we are from the dear old home and friends."

We expect to hear from A. H. J. through the Household the same as ever and anticipate very pleasant letters from her in her new home.

Mrs. E. Jennie Ellis, of Alma, Mich., writes that if anyone in need of a good mitten pattern will write to her she will send them one. The Editor would like to say to those taking advantage of this offer, don't forget to enclose a stamp for return postage. I also have several patterns which have been sent in; these will go to those asking for them on above terms.

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The Modern STOVE POLISH.
Produces a JET BLACK enamel gloss. Dustless, Odorless, Labor Saving. 5 and 10 cent boxes. Try it on your Cycle Chain.
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For the Michigan Farmer.

WAITING.

I have one little angel waiting for me
On the beautiful banks of the crystal sea;
Forever free from sorrow and pain,
Spotless and pure from all earthly stain;
Never in erring paths to rove—
Safe in the bosom of infant love,
Evermore, evermore walking in light,
The beautiful angel robed in white.

I have one little angel waiting for me
On the beautiful banks of the crystal sea;
When my heart is sore and throbbing
With pain,

And I fain would clasp my darling again;
I look away from this earthly strand
To the beautiful fields of the better land,
And think of the angel waiting there,
And offer to God a thankful prayer.

I have one little angel to welcome me,
When I, too, shall stand by the crystal
sea;
When the Great Refiner His image shall
trace
In the heart He has won by His saving
grace;
And in robes of Christ's own righteousness
My soul shall seek the home of the blest—
On the beautiful banks of the crystal sea
My darling, still waiting, shall welcome
me.

MRS. W. H. W.

ILL BECAUSE OF OVERWORK.

Dear Sisters of the Household: I am a reader of the Household and much pleased with it. I never have written anything for this department, but I have some verses I would like to send for the benefit of Gail Leslie (see head of first column—Ed.), hoping they may give her consolation in her bereavement. I read in a late Household that she has been confined to her bed for so long, and can fully sympathize with her, as I have been in bed now for four months and have not the faintest idea how much longer I must stay here. In The Farmer of Jan. 1 I see a letter from Mrs. Mac that tells of my great mistake the past year, and even long before that. It is this: I overworked and then did not doctor when I should, and this is why I am in bed today. Sisters, take warning from me and take care of your health, for all the comforts and blessings of life (even the attentions of a kind husband) are of but little joy when you are sick in bed. If it were not for the Bible I don't know what I should do. But each day I thank the Lord that it is no worse with me than it is. We have a great many, many things to be thankful for. Things are bad indeed when they could not be worse.

I hope we shall hear from Mrs. Grace often.

Now, dear sisters, let us do all we can to help each other the coming year. Let us do all we can to help in the church, in the home, in the farmers' club and the Grange; and let us above all be true to our God, to our children and to ourselves.

KITTY D.

(Here we have one more case of ill health brought about by overwork. I wish to emphasize what our correspondent says about this. Never mind what anybody says about your being "lazy," or "shiftless," as some uncharitable ones may, don't work beyond your strength. A letter received to-day from another correspondent says: "My next door neighbor is insane; cause, overwork." Don't do it.—Ed.)

SHORT STOPS.

Exit, writes: I have been making sausage and wonder if any of the Household readers treat it as I do, that is the portion of it which they intend to keep. I pack the seasoned meat snugly in flat, gallon crocks and put it in the oven to bake. When the grease has started so that by pressing upon the top of the meat the hot grease rises over it I take it out and set it aside to cool, first placing a small plate upon it with a weight that will keep the meat under the surface. When the contents of the crock are cold remove the plate and fill up with melted lard. This meat will keep as long as we want it. To use it, cut out in slices and fry as usual.

Mrs. J. I. C., writes: My husband subscribed for The Farmer a short time ago, so the members of the Household are nearly all strangers to me. I enjoy reading the letters every week and tried to think of something to write that might help someone, as I have been helped. I have for years been troubled every winter with itching chilblains and when I read in the Household that essence of peppermint would help this very annoying complaint I gave it a trial, and sure enough it relieved me entirely. That one thing was worth more than the price of the paper to me.

I can tell how to hull corn without

the bother of making lye in the old-fashioned way. I take one-third cup baking soda to a quart of nice shelled corn, with enough water to just cover it. Boil till the hulls will slip off between the fingers, then wash in plenty of water until all are removed, rubbing with the hands. Then cook in plenty of clear water, adding salt to taste when it is tender. We like it cold with cream and sugar.

PAGAN, PURITAN OR PIG.

When Madaline Wynne wrote her article for the Outlook, "The Pagan and the Puritan," she might well have added "and the Pig." I admit it would not have looked so well in print, nor sounded so harmoniously to the ear, but it would bespeak a strong, distinct feature, not quite attributable to the pagan or the puritan, yet very marked in the average individual.

The pagan, the puritan, and the pig. Civilization has lessened the numbers of the pagan, changed, somewhat, the puritan; but the pig is the pig still, pure and simple. From gilded court to dismal tenement he is seen, felt, heard. There is no exemption for class, creed, or color, and so familiar have we become that the shamefulness of its presence daunts us little. Here is a common illustration:

A stranger drove to our door. One can tell the manner of man by the way he alights from a rig, and this one exhibited all the requisites we like in the man we are going to hire, but deplore in the agent. It means, surrender or arm for contest.

"Madam, I can show you samples of goods, make you prices that will leave a good margin over previous purchases, and thus increase your pin money. Our firm is old, rich and reliable. Here is a list of your neighbors who were quick to avail themselves of our excellent offer.

Yes, there they were, and their orders ranged from \$5 to \$30.

"Does your firm supply any of our city merchants?"

"Certainly," and he gave names of leading dealers.

"You say your firm is rich and reliable. Does that mean honorable?"

"Why, certainly it does!"

"And do you call it honorable to furnish these dealers, then send out a man of no mean ability to undersell, undermine, them? During the severe financial struggle that is still upon us these home dealers have been our immediate relief. There are names upon your list that I venture to say are still upon their books, and accounts yet unsettled. If all the trades were worked upon this line, how long before our little city would be like unto the deserted village. Our land would be depreciated, our market gone. Then what avail the paltry profit you tender us? It would seem to me, in this hour of our enlightenment, that moral law should suffice. If it is wanting then I would ask for legislative protection. I would ask that such men as you be retired."

"But, madam, I have my bread to win."

"True, yet a man of your gifts may find ways and means and not defraud a fellow man. I can give you no order. If pressing need came to me I should not go to your rich, reliable firm for aid, but to those home dealers, whom I should wrong if I gave you my patronage."

The man's face betrayed a struggle within. Would pagan, puritan or pig win. I will let you judge for yourself.

"Madam, I admit that your plowshare is barbed with truth and that you have turned a deep furrow, but we are all in the swim, and they who pause to build a moral craft will find themselves left."

FLINT. LUCY SWIFT.

In caring for the sick, particularly with regard to fever patients, it is well to disinfect the mattress occasionally by sprinkling lightly with carbolic acid in water—a teaspoonful to a quart of water—or by passing a cloth wrung moderately dry from the solution over every part of it. All blankets, etc., should be washed thoroughly at frequent intervals and well disinfected. Sheets and pillow slips should be fresh every day, and pillows given a thorough airing out of doors, aside from giving them the treatment recommended for the mattress.

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LADIES WANTED to make sample patches at home. \$5 to \$10 per week. No canvassing. Send reply envelope for sample and particulars. **POSTER MACHINE CO.** 525 West 29th Street, New York City.

MOTHERS Your Children cured of Bed wetting. Sample free. Dr. F. E. MAY, Bloomington, Ill.

A favorite mode of arranging a little sex and tied at the opposite side of child's hair (whether boy or girl) is the forehead with a dainty ribbon to to arrange it in soft ringlets, which keep it from falling over the face. most mothers understand doing by Older girls wear the hair in one or brushing it around the finger. The two long braids or loose; but it is hair is parted at the side regardless of no longer crimped.

BEWARE OF MORPHINE.

Mrs. Pinkham Asks Women to Seek Permanent Cures and Not Mere Temporary Relief From Pain.

Special forms of suffering lead many a woman to acquire the morphine habit. One of these forms of suffering is a dull, persistent pain in the side, accompanied by heat and throbbing. There is disinclination to work, because work only increases the pain.

This is only one symptom of a chain of troubles; she has others she cannot bear to confide to her physician, for fear of an examination, the terror of all sensitive, modest women.

The physician, meantime, knows her condition, but cannot combat her shrinking terror. He yields to her supplication for something to relieve the pain. He gives her a few morphine tablets, with very grave caution as to their use. Foolish woman! She thinks morphine will help her right along; she becomes its slave!

A wise and a generous physician had such a case; he told his patient he could do nothing for her, as she was too nervous to undergo an examination. In despair, she went to visit a friend. She said to her, "Don't give yourself up; just go to the nearest druggist's and buy a bottle of Mrs. Lydia E. Pinkham's Vegetable Compound. It will build you up. You will begin to feel better with the first bottle." She did so, and after the fifth bottle her health was re-established. Here is her own letter about it:

"I was very miserable; was so weak that I could hardly get around the house, could not do any work without feeling tired out. My monthly periods had stopped and I was so tired and nervous all of the time. I was troubled very much with falling of the womb and bearing-down pains. A friend advised me to take Lydia E. Pinkham's Vegetable Compound; I have taken five bottles, and think it is the best medicine I ever used. Now I can work, and feel like myself. I used to be troubled greatly with my head, but I have had no bad headaches or palpitation of the heart, womb trouble or bearing-down pains, since I commenced to take Mrs. Pinkham's medicine. I gladly recommend the Vegetable Compound to every suffering woman. The use of one bottle will prove what it can do."—MRS. LUCY PRASLEY, Derby Center, Vt.



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Address all orders to THE MICHIGAN FARMER, Detroit, Mich.

Legal Department.

CONDUCTED BY EARL D. BABST,
36 Moffat Building, Detroit.

M. L. D., Smith, Mich.—We regret we cannot give the text of the bill to which you refer. It has not become a law and we have not as yet seen it.

Establishing Claim to English Estate.—E. L. S., Isabella Co., Mich.—Where there is money in England left to heirs in this country, in what way should the heirs proceed to obtain it?—Your best course would be to place the matter in the hands of some attorney who can handle the matter through his correspondents in England.

One by Will May Choose the Objects of Their Bounty as They Please.—Subscriber, Bloomington, Mich.—Can a married woman, having property acquired before marriage and having no children, dispose of it by will to her relatives without willing anything to her husband?—Yes. She may dispose of her own separate estate as she pleases.

Equal Installments Presumed in Absence of Definite Agreement.—C. E. W., Pontiac, Mich.—A rents farm of B. Lease provides for cash rent of \$150 in installments, to-wit: First installment to be paid Nov. 1, 1897, and second, March 1, 1898. No amount being stated, could B collect \$75 on each of the dates when installments become due?—If the lease is payable in two installments and no amount is stated it is presumed that the installments are equal and therefore B could collect \$75 on each date.

Inheritance by Kindred of the Half Blood.—G. H., Northville, Mich.—Can a half sister share in the property of a deceased half sister equally with the deceased's own sister?—Kindred of the half blood inherit equally with those of the whole blood in the same degree, unless the inheritance, being real estate, comes to the intestate by descent, devise or gift of some of his ancestors, in which case all those who are not of the blood of such ancestor are excluded from the inheritance.

Damage to Telegraph Lines.—H. G. S., Portland, Mich.—If a telegraph or telephone line, built along a country road, is accidentally broken by a farmer in felling trees alongside the highway, who is responsible for the damage done the line?—Telegraph and telephone companies are specially authorized to construct their lines along highways. Any willful injury to such lines is a misdemeanor, and injury to such lines by carelessly and negligently felling trees would give rise to an action in damages by the company.

No Patent or Monopoly on Hand-Made Wire Fence.—R. C., Charlevoix, Mich.—Can I build a wire fence on my own farm, stretching line wires and then weaving cross wires by hand, without buying farm right from a man who claims to have a township right to build a hand-woven wire fence? There can be no patent on the use of line wires woven with vertical stay wires. There can be no monopoly on old devices simply because they are made by hand. We are indebted to Fisk & Thomas, patent attorneys, Detroit, for above information.

Penalty for Allowing Diseased Sheep to Run at Large.—A Subscriber, Penn. Mich.—B owns sheep suffering from scab. Has he a right to let them run on the highway. If not what measures can be taken to compel him to remove them? Is there a state officer whose duty it is to inspect flocks suffering from infectious diseases?—Any person owning sheep suffering from any contagious disease, knowing them to be so diseased, and who turns out or suffers them to run at large upon any highway or unenclosed lands, is guilty of a misdemeanor, and may be punished by a fine of not less than fifty nor more than one hundred dollars, and in default of payment of such fine, by imprisonment in the county jail for not more than three months. This does not, however, prevent recovery of damages in a civil action by any one suffering injury from the running at large of such diseased sheep. It is the duty of any person who discovers, suspects, or has reason to believe any sheep infected with a contagious or infectious disease, to immediately report same to State Live Stock Commission, Lansing, or member thereof, or to local board of health. Failure to do so is a misdemeanor. State Commission is required to investigate and may order sheep killed, in which case owner is paid an appraised value by the State.

The Markets.

WHEAT.

The market has been steadier the past week, and values are somewhat higher. The position is getting stronger as the visible supply has begun decreasing, while stocks are the lowest for years at this season. The Chicago clique is said to be selling some wheat on bulges, but it really looks as if they had a good thing after all. They are said to control 15,000,000 bu of high-grade wheat, and it looks as if millers would be paying them a good price for it within the next month or so. Liverpool was higher Thursday while Paris was lower.

The following table exhibits the daily closing sales of spot wheat in this market from January 1 to January 20, inclusive:

	No. 1 White.	No. 2 Red.	No. 3 Red.
Jan. 1.....	91	91	86 1/2
" 2.....	90 1/2	90 1/2	86 1/2
" 3.....	91	90	86
" 4.....	90 1/2	90 1/2	86
" 5.....	91 1/2	91 1/2	87 1/2
" 6.....	91 1/2	91 1/2	87
" 7.....	90 1/2	90 1/2	86 1/2
" 8.....	91 1/2	91 1/2	87
" 9.....	91 1/2	91 1/2	87 1/2
" 10.....	91 1/2	91 1/2	87 1/2
" 11.....	91 1/2	91 1/2	87 1/2
" 12.....	91 1/2	91 1/2	87 1/2
" 13.....	91 1/2	91 1/2	87 1/2
" 14.....	91 1/2	91 1/2	87 1/2
" 15.....	91 1/2	91 1/2	87 1/2
" 16.....	91 1/2	91 1/2	87 1/2
" 17.....	91 1/2	91 1/2	87 1/2
" 18.....	91 1/2	91 1/2	87 1/2
" 19.....	91 1/2	91 1/2	87 1/2
" 20.....	91 1/2	91 1/2	87 1/2

The following is a record of the closing prices on the various deals in futures each day during the week:

	May.	July.
Friday.....	91 1/2	82
Saturday.....	91 1/2	82 1/2
Monday.....	91 1/2	82 1/2
Tuesday.....	92 1/2	83 1/2
Wednesday.....	92 1/2	83 1/2
Thursday.....	92 1/2	84

The visible supply of wheat on Saturday last in the United States and Canada was 37,838,000 bu, as compared with 38,863,000 bu the previous week, and 52,450,000 bu at the corresponding date last year. The decrease for the week was 1,025,000 bu.

The Buenos Ayres Standard estimates the exportable surplus of wheat in Argentina at 1,200,000 tons, or nearly 45,000,000 bu.

The Marche Francals says that French crop advice are rather at variance to the consequence of the present abnormal weather—the late sown wheat looks well, but in general farmers would welcome a little harsher temperature to prevent the plants from developing too rapidly.

Broomhall, of the Corn Trade News, estimates world's shipments of breadstuffs for the week as follows: United States and Canada, 4,076,000 bu; Russia, 1,610,000 bu; Roumania, 160,000 bu; Argentina, 40,000 bu; other countries, 362,000 bu; total, 6,248,000 bu.

Official India crop report says: "Punjab, northwest and Oudh, average area: Sind, increased area; prospects excellent. Bombay, Bern, central provinces, area greatly deficient; prospects unsatisfactory. Ralli cables that rain is badly needed in Delhi, also Punjab in less degree."

The clique that controlled December wheat in Chicago has a fair stock of good milling wheat in store, and reports have it that contracts for sale of it to Minneapolis millers have been made, though the purchase is in some quarters disputed. A year ago about 40,000,000 bu wheat came into Minneapolis and Duluth after January 1. This year the supply cannot be so heavy, the only question about it being as to how much less it will be. The indications are that the marketings in Minneapolis and Duluth will be about 15,000,000 bu less than last year and 25,000,000 bu less than in 1896.—Northwestern Miller.

It is obvious sellers and buyers of wheat on both sides of the Atlantic have failed to realize the serious character of the statistical position of wheat. Buyers have ignored a deficiency in the world's production in relation to consumption without precedent. According to official estimates, the United States, after exporting 20,000,000 bu per month for the first five months, will have only about 8,000,000 bu per month to ship the remaining seven months. This is not more than half the monthly requirements of the United Kingdom alone from foreign sources, to say nothing of the needs of other importing countries.—London Agricultural Gazette.

DAIRY PRODUCTS.

BUTTER.

Large receipts, especially of dairy, with warm and muggy weather, have combined to weaken the local butter market, and at present a good deal of the receipts are selling rather below current quotations. Ordinary creamery has declined since our last report. Quotations are as follows: Creamery, 19¢; common dairy, 15¢; fair to good, 13¢; common, 11¢; 12¢; low dairy grades, 8¢; 9¢. The Chicago market is duller and lower. Demand is light and the receipts large. The situation is very unfavorable for holders. Quotations on Thursday were as follows: Creameries, extras, 18¢; firsts, 16¢; seconds, 13¢; 15¢. Dairies, extras, 17¢; firsts, 14¢; seconds, 11¢; 12¢. Ladies, extras, 12¢; 13¢. Packing stock, 11¢; roll butter, 11¢. At New York fancy creamery holds steady under an improved demand from shippers, but other grades are slow, and storage stocks difficult to move. The market shows few features of interest, but dealers are expecting an improvement as soon as the weather becomes more favorable. Quotations in that market on Wednesday were as follows: Creamery, western, extras, per lb, 20¢; do, firsts, 18¢; do, thirds to seconds, 14¢; 17¢; do, State, finest, 19¢; do, firsts, 17¢; do, thirds to seconds, 14¢; 16¢; do, June make, extras, 18¢; 19¢; do, thirds to firsts, 14¢; 17¢; State dairy, half-firkin tubs, fall ends, finest, 18¢; do, Welsh tubs, finest, 15¢; do, firkins, finest, 17¢; 18¢; half-tubs or firkins, firsts, 16¢; 17¢; do, thirds to seconds, 13¢; 15¢; imitation creamery, fancy, 16¢; 17¢; do, seconds to firsts, 13¢; 15¢; factory, fresh, extras, 14¢; do, seconds to

firsts, 13¢; 14¢; do lower grades, 11¢; 12¢; do, June make, extras, 14¢; do, thirds to firsts, 11¢; 13¢; do, rolls, fresh, fancy, 13¢; 14¢; do, poor to choice, 11¢; 13¢.

CHEESE.

We note a slight improvement in our local market as the result of decreasing stocks, best creamery now being quoted at 10¢; 11¢ per lb. At Chicago the market is dull and neglected, but values have been sustained, and an improvement is expected. Quotations in that market on Thursday were as follows: Young American, 7¢; Swiss, 9¢; 10¢; limburger, 7¢; 10¢; brick, 8¢; 10¢. The New York market shows increasing firmness, and there is a stronger tone apparent, holders seeming to be confident of present prices not only being maintained, but an advance being reasonably sure. Exporters are doing a fair amount of business, although higher freights have restricted them to some extent. Quotations in that market on Thursday were as follows: State, full cream, large, fancy, September, 8¢; do, choice October, 8¢; 8¢; do, fair to good, 7¢; 8¢; do, common, 6¢; 7¢; do, colored or 7¢; 8¢; white, small, fancy, September, 9¢; 9¢; do, small, choice, October, 8¢; 8¢; do, common to good, 7¢; 8¢; part skims, small, choice, 6¢; 6¢; do, large, choice, 5¢; do, good to prime, 4¢; 5¢; do, common to fair, 3¢; 4¢; full skims, 2¢; 3¢.

At Liverpool, on Thursday, the finest white and colored American cheese was quoted at 43s 6d per cwt of 112 lbs, the same range as quoted a week ago.

WOOL.

Cable reports from the London wool sales state that the offerings are very faulty in character, especially in fine merinos. Where fairly good an advance of 1d (2c) has been obtained. Americans are taking some of the best greasy (unwashed) Australian merinos at the advance. This means a further advance on similar wools on this side of the Atlantic.

Quotations in the Boston market are as follows: Ohio and Pennsylvania fleeces, X and above, 26¢; XX and X above, 29¢; 30¢; delaine, 30¢; 31¢; No 1 combing, 30¢; 31¢; No 2 combing, 30¢. Michigan, Wisconsin, etc.—XMichigan, 24¢; No 1 Illinois combing, 29¢; No 2 Michigan combing, 28¢; 29¢; No 2 Illinois combing, 28¢; 29¢; X New York, New Hampshire and Vermont, 22¢; 24¢; No 1 New York New Hampshire and Vermont, 27¢; delaine, Michigan, 27¢.

BALED HAY.

Detroit.—Market has declined since a week ago. Quoted as follows: Timothy, \$7.50; mixed, \$7.40; rye straw, \$5; wheat straw, \$4; oat straw, \$4.

Chicago.—Quoted as follows: Choice timothy, \$9.00; No 1 timothy, \$8.50; No 2 timothy, \$7.50; choice upland prairie, \$7.50; No 1 upland prairie, \$6.50.

New York.—Market dull even at present low range of values: Choice timothy, large bales, \$15; No 1, \$13.50; No 2, \$12.50; No 3, \$9.00; clover mixed, \$9.10; best long rye straw, \$10.11; irregular grades, \$7.00 per ton.

Philadelphia.—Timothy, choice, large bales, \$12; do, No 1 large bales, \$11.50; do, choice, small bales, \$11.50; do, No 1, \$10.50; do, No 2, \$9.50; do, No 3, \$7.50; mixed No 1, \$8.50; do, No 2, \$7.50; straw, No 1 straight rye, \$9; No 2 do, \$8.50; tangled rye, \$7.50; wheat and oat straw, \$6.50.

DETROIT PRODUCE MARKET.

Detroit, January 20, 1898.

FLOUR.—Quotations on jobbers' lots in barrels are as follows:
Straights.....\$4.75
Clear.....4.50
Patent Michigan.....5.25
Low Grade.....3.75
Rye.....3.25
Buckwheat.....3.75
Granulated Corn Meal.....2.00

CORN.—The visible supply of this grain on Saturday in the United States and Canada was 41,134,000 bu, as compared with 39,513,000 bu the previous week, and 21,522,000 bu at the corresponding date in 1897. Quotations on this market are as follows: No 2, 29¢; No 3, 28¢; No 2 yellow, 29¢; No 3 yellow, 28¢ per bu.

OATS.—The visible supply of this grain in the United States and Canada on Saturday last was 15,063,000 bu, as compared with 14,772,000 bu the previous week, and 13,621,000 bu at the corresponding date in 1897. Quotations are as follows: No 2 white, 26¢; No 3 white, 25¢; market steady.

RYE.—The visible supply of this grain in the United States and Canada on Saturday last was 4,151,000 bu, as compared with 4,100,000 bu the previous week, and 3,443,000 bu at the corresponding date in 1897. No 2 quoted at 48¢ per bu, with a quiet market.

FEED.—Jobbing quotations on carload lots are as follows: Bran and coarse middlings, \$12; fine middlings, \$14; cracked corn, \$13; coarse cornmeal, \$12; corn and oat chop, \$11 per ton.

BARLEY.—Quoted at 75¢ per cwt.

TIMOTHY SEED.—Selling at \$1.25 per bushel.

CLOVER SEED.—Prime, \$3.20 per bu; March, \$3.22 1/2; No 2, \$2.90; 3.00; Alsike, \$4.40.

BUTTER.—Quoted as follows: Creamery, 19¢; fancy dairy, 14¢; fair to good, 12¢; 13¢; low grades, 8¢; 9¢ per lb.

CHEESE.—Michigan full cream quoted at 10¢; 11¢ per lb.

POULTRY.—Dressed quoted as follows: chickens, 7¢; 7 1/2¢ per lb; turkeys, 10¢; 11¢; ducks, 8¢; 9¢; geese, 8¢. Live quoted 1¢ 2c below these prices.

EGGS.—Fresh receipts quoted at 20¢; 21¢ per doz; storage, 15¢; 16¢ per doz.

DRIED FRUITS.—Evaporated apples, 8¢; 9¢; evaporated peaches, 10¢; 12¢; dried apples, 5¢; 6¢ per lb.

APPLES.—Fair grades, \$2.00; fancy fruit, \$3.75; 4.00 per bbl.

HONEY.—Quoted at 10¢; 13¢ per lb for ordinary to best.

CRANBERRIES.—Selling at \$7.25 per bbl for Cape Cod.

BEANS.—Market steady at a range of 92¢; 95¢ per bu in car lots.

POTATOES.—Good Michigan stock selling at 55¢; 58¢ per bu in carload lots; in small lots 60¢; 65¢ is paid. Market firm. At Cleveland fancy white varieties are quoted at 65¢; 70¢ per bu; good to choice, 60¢; 65¢; car lots, 52¢; 58¢ per bu.

RUTABAGAS.—Quoted at 25¢; 30¢ per bu.

ONIONS.—Selling at 65¢; 70¢ per bu for Michigan.

CABBAGE.—Quoted at 35¢ per doz by dealers; selling at 10¢; 15¢ per doz, or \$1.50 per hundred on the market.

DRESSED HOGS.—\$3.75; 4¢ per cwt for heavy and 25¢; 50¢ more for light butchers' stock.

TALLOW.—Quoted at 34¢; 35¢ per lb.

PROVISIONS.—Barreled pork and lard are higher, and the general market is firm. Quotations are as follows: Mess pork, \$9 per bbl; short cut mess, \$10; short clear, \$9.25; compound lard, 4¢; family lard, 4¢; kettle lard, 5¢; smoked hams, 8¢; 8 1/2¢; bacon, 8¢; 8 1/2¢; shoulders, 5¢; picnic hams, 5¢; extra mess beef, \$8.75; plate beef, \$9.25.

HIDES.—Market firm. Latest quotations are as follows: No 1 green, 7 1/2¢; No 1 cured, 9¢; No 2 green, 6¢; No 2 cured, 5 1/2¢; No 1 cured calf, 10¢; 11¢; No 2 cured calf, 9¢; 10¢; No 1 green calf, 9¢; No 2 green calf, 7 1/2¢ per lb; sheepskins, as to wool, 75¢; 81.25; shearings, 20¢; 35¢.

COFFEES.—Revised quotations are as follows: Roasted Rio, ordinary, 9¢; fair 11¢; Santos, good 14¢; choice 15¢; Maracaibo, 20¢; 25¢; Java, 26¢; 30¢; Mocha, 28¢; 32¢.

OILS.—Linseed and lard oils are firm, and higher. No other changes. Latest quotations are as follows: Raw linseed, 42¢; boiled linseed, 44¢ per gal, less 1¢ for cash in ten days; extra lard oil, 42¢; No 1 lard oil, 32¢; water white kerosene, 8 1/2¢; fancy grade, 11¢; deodorized stove gasoline, 7¢; turpentine, 40¢ per gal in bbl lots; in less quantities, 45¢; 47¢ per gal.

HARDWARE.—Latest quotations are as follows: Wire nails, \$1.70; steel cut nails, \$1.65 per cwt, new card; axes, single bit, bronze, 5¢; double bit, bronze, \$8.50; single bit, solid steel, \$6; double bit, solid steel, \$9.50 per doz; bar iron, \$1.40; carriage bolts, 75¢ per cent off list; tire bolts, 70¢ and 10¢ per cent off list; painted barbed wire, \$1.70; galvanized do, \$2.00 per cwt; single and double strength glass, 60¢ and 5¢ per cent off list; sheet iron, No 24, \$2.50 per cwt; galvanized, 75¢ and 10¢ per cent off list; No 1 annealed wire, \$1.50 rates.

DETROIT LIVE STOCK MARKET.

Michigan Central Stock Yards.

Detroit, January 20, 1898.

CATTLE.

The receipts of cattle were light Thursday, only 225 on sale as compared to 640 one week ago. Of fair average quality. Trade was active, the few here sold early at strong last week's prices, \$4.00 to \$4.10 were the highest prices paid to-day for fair quality butcher steers and heifers av \$50 to 1,000 lbs, but the bulk changed hands at prices ranging from \$3.25 to \$3.85; old to good fat cows, \$2.00 to \$3.50; bulls, good shippers, \$3.30 to \$3.60; fair to good butchers, \$2.65 to \$3.25; stockers and feeders, \$3.00 to \$3.90. Veal calves—Receipts, 63; one week ago, 33; higher; sales at \$5.00 to \$6.50 per 100 lbs. Milch cows and springers fairly active at prices ranging from \$30.00 to \$47.50 each, sales mostly at \$35.00 to \$45.00.

Robb sold Sullivan 7 steers av 765 at \$3.60; 1 do to Black weighing 800 at \$2.60 and a cow weighing 1000 at \$2.65.

White sold Magee 2 common butcher cows av 1010 at \$2.30; 2 heifers to Caplis & Co av \$50 at \$3.50 and a cow weighing 1170 at \$3.00.

Oversmith sold Black 2 fat cows av 1170 at \$3.10; a bull to Nickolson weighing 710 at \$3.25 and 4 feeders av 732 at \$3.75.

Ansty sold Mich Beef Co a bull weighing 1530 at \$3.25, 2 steers av 725 at \$3.50, 3 heifers av 673 at \$3.50, 2 steers av 855 at \$4.00 and a cow weighing 1000 at \$3.00.

Taggart sold Black 8 steers av 815 at \$3.80.

Bandfield sold Regan 8 mixed butchers av 592 at \$3.50 and a cow weighing 1030 at \$2.50; 3 steers to Mich Beef Co av 800 at \$3.75 and 2 bulls av 1285 at \$3.05.

Townsend sold Robinson a heifer weighing 1080 at \$3.80, 3 mixed butchers to Marx av 823 at \$3.35 and 5 do to Mich Beef Co av 786 at \$3.50.

Shook sold Mich Beef Co a bull weighing 1180 at \$3.00; 3 heifers to Schleicher av 765 at \$3.60 and 3 mixed butchers av 833 at \$2.75.

T Bresnahan sold Mich Beef Co a canner weighing 750 at \$2.00 and 2 good sausage bulls av 1200 at \$3.00.

Glenn sold Fitzpatrick 5 mixed butchers av 906 at \$3.25 and 2 cows av 1150 at \$3. Stoll & Carter sold Mich Beef Co 7 steers and heifers av 728 at \$3.70.

Burden sold Black 8 steers and heifers av 932 at \$3.70, a fat bull to Sullivan weighing 1739 at \$2.60, and a steer weighing 640 at \$3.25; also a bull to Mich Beef Co weighing 600 at \$3.

Reason sold same 19 mixed butchers av 1053 at \$3.45.

Clark & B sold Black 12 steers and heifers av 804 at \$3.70, and a cow weighing 1190 at \$3, 2 steers to Sullivan av 775 at \$3.70.

Lewis sold Black 4 cows av 1037 at \$3, and 3 heifers av 923 at \$3.50; also 3 steers to Sullivan av 1250 at \$3.50.

Bresnahan & H sold Magee 11 cows av 1110 at \$2.65.

Spicer & M sold Cook & Fry 8 mixed butchers av 688 at \$3.25, and 7 cows to Caplis & Co av 950 at \$2.95.

Roe & Holmes sold Robinson 4 mixed butchers av 887 at \$3.65, a steer weighing 890 at \$4, and 2 cows av 1040 at \$3.

Oversmith sold Black 2 (steer and heifer) av 1080 at \$4, and 4 mixed butchers av 867 at \$3.40.

Major sold Mich Beef Co 2 mixed butchers av 906 at \$3.50.

Sturges sold Robinson 7 steers av 840 at \$3.80.

Winslow sold Fitzpatrick 9 common butcher cows av 938 at \$2.50.

SHEEP AND LAMBS.

Receipts Thursday, 906; one week ago, 726. Market fairly active with sales at about last week's prices. Range of prices: Good to choice lambs, \$5.40 to \$5.60; light to good, \$4.50 to \$5.30; fair to good mixed butchers, \$3.60 to \$4.50; culls to common, \$2.50 to \$3.50.

Kenney & S sold Hammond, S & Co 33 lambs av 75 at \$5.50, 3 common av 97 at \$3.25 and 2 culls av 70 at \$2.50.

Roe & Holmes sold Monaghan 60 mixed av 99 at \$4.50.
Burden sold Hiser 18 mixed av 83 at \$4.40.
Lord sold Sullivan Beef Co 20 mixed av 93 at \$4.06.
Robb sold Hammond S & Co 26 lambs av 84 at \$5.60 and 9 av 91 at \$3.75.
Lewis sold Fitzpatrick 33 lambs av 76 at \$5.25 and 37 mixed av 78 at \$3.75.
Major sold Monaghan 75 sheep and lambs av 77 at \$4.75.
Roe & Holmes sold Robinson 35 lambs av 63 at \$4.50 and 33 mixed av 83 at \$4.50.
Hays & S sold Sullivan Beef Co 40 lambs av 81 at \$5.45.
Kelsey sold Mich Beef Co 18 lambs av 63 at \$5.00.
Clark & B sold same 32 lambs av 78 at \$5.25, 19 sheep av 93 at \$4.00 and 4 culls av 75 at \$3.00.
White sold Sullivan Beef Co 24 lambs av 67 at \$5.00.
Spicer & M sold Mich Beef Co 102 mixed av 102 at \$3.85.
Stoll sold Monaghan 66 mixed av 75 at \$4.25 and 12 culls av 66 at \$2.75.
Glenn sold Mich Beef Co 62 lambs av 76 at \$5.30.
Pinckney sold same 75 lambs av 62 at \$5.40.
Shook sold Hiser 22 lambs av 77 at \$5.40.

HOGS.

Receipts, Thursday, 3,524, as compared with 4,007 one week ago. Market active and 10c higher than prices paid last Friday. Range, \$3.62½ to \$3.70, bulk at \$3.67½ and \$3.70; stags, 1-3 off; roughs, \$3.00 to \$3.25; pigs, \$3.50 to \$3.75.
Brands sold Randall 12 pigs av 73 at \$3.65.
Lewis sold Kenner 15 pigs av 76 at \$3.75.
Brands sold Sullivan 45 av 147 at \$3.65.
Coats sold same 85 av 175 at \$3.67½.
Trowbridge sold same 10 av 217 at \$3.65.
Haley Bros sold same 141 av 190 at \$3.62½.
Williamson sold same 50 av 206 at \$3.67½.
Hogan sold same 72 av 187 at \$3.65.
Glenn sold same 24 av 149, and 20 av 124 at \$3.65.
Allen sold same 38 av 181 at \$3.62½.
Bunnell sold same, 105 av 180 at \$3.67½.
Brewer & B sold same 75 av 171 at \$3.70.
Sturges sold same 21 av 130 at \$3.60.
Bandfield sold same 44 av 179 at \$3.60, and 107 av 197 at \$3.67½.
Pinkney sold same 52 av 171 at \$3.67½.
Haller & Co sold same 83 av 172 at \$3.70.
Lewis sold same 70 av 173 at \$3.67½.
Reason sold same 48 av 164 at \$3.65.
Hawley sold same 32 pigs av 97 at \$3.67½, and 112 av 172 at \$3.67½.
Ansty sold same 36 av 139 at \$3.65.
Kalahan sold R S Webb 76 av 218 at \$3.70.
Belhimer sold same 37 av 189 at \$3.70.
Watts sold same 85 av 172 at \$3.70.
Kapp sold same 77 av 189 at \$3.70.
Dillon sold same 82 av 190 at \$3.65.
Roe & Holmes sold Farnum 40 av 179 at \$3.70.
Mayer sold Hammond, S & Co 78 av 217 at \$3.67½.
Ackley sold same 58 av 263 at \$3.67½.
Jelsch sold same 109 av 205 at \$3.67½.
Kenney & S sold same 106 av 191 at \$3.65.
Roe & Holmes sold Parker, Webb & Co 62 av 177 at \$3.67½.
Van Buskirk sold same 131 av 176 at \$3.67½.
O M Baker sold same 103 av 156 at \$3.65.
Robb sold same 20 av 131, and 45 av 137 at \$3.65.
Taggart sold same 81 av 184 at \$3.67½.
Henderson sold same 86 av 185 at \$3.67½.
Brophy sold same 45 av 172 at \$3.67½.
Burden sold same 32 av 216 at \$3.67½.
Lord sold same 29 av 141 at \$3.65.
Spicer & M sold same 84 av 190, 31 av 200, and 43 av 172 at \$3.67½.
Roe & Holmes sold same 31 av 156, 120 av 209, 59 av 159, 144 av 179, and 78 av 190, all at \$3.67½.
Spicer & M sold same 27 av 236 at \$3.67½.
White sold same 42 av 154 at \$3.67½.
Kelsey sold same 63 av 210, and 52 av 188 at \$3.67½.

Friday, January 21, 1898.
CATTLE.

Receipts Friday, 223; one week ago, 212. Market active and unchanged. \$4.10 was top price to-day for steers av 980 lbs, balance as noted. Veal calves and milch cows steady.
A A Bray sold Mich Beef Co 8 mixed butchers av 1,090 at \$3.30 and a cow weighing 1,130 at \$2.50.
Allen sold same 13 mixed butchers av 810 at \$3 and 2 common butcher cows av 975 at \$2.25.
Scelley sold same 11 steers and heifers av 704 at \$3.70.
Judson sold Black 8 mixed butchers av 1,062 at \$3.50.
Roberts & S sold Mich Beef Co 8 mixed butchers av 1,090 at \$3.30.
Luckie sold same a fat bull weighing 1,460 at \$3.50 and a steer weighing 920 at \$3.65.
Armstrong sold same 24 steers and heifers av 834 at \$3.70 and 2 cows av 985 at \$3.
Weitzel sold Robinson 3 steers and heifers av 770 at \$3.90.
Fox & Bishop sold Regan 4 mixed butchers av 597 at \$3.40 and 3 heifers to Marx av 1,043 at \$3.95.
Roe & Holmes sold Mich Beef Co 2 bulls av 1,435 at \$3.20, 7 steers and heifers av 920 at \$3.80 and a cow weighing 1,100 at \$2.50.
Richmond sold same 8 steers av 980 at \$4.10, 2 mixed to Black av 1,130 at \$3.50, 2 cows av 935 at \$3 and 2 do av 950 at \$2.75.
Fox & Bishop sold Black 4 cows av 1,145 at \$3.10.
Patrick & Pline sold Kammen 3 cows av 950 at \$3 and 1 do weighing 830 at \$2.75.
Spicer & M sold Fitzpatrick 2 cows av 905 at \$3.25 and a bull weighing 1,400 at \$3.35 and 6 stockers to Henning av 678 at \$3.65.
Roe & Holmes sold Hayman 3 stockers av 546 at \$3.30, 8 steers to Robinson av 980 at \$4.10 and 2 fat cows av 1,200 at \$3 and 5 mixed butchers to Kammen av 602 at \$3.
Lowrey sold Mich Beef Co 3 oxen and bull av 1,460 at \$3.15, 2 fat cows to Black av 1,225 at \$3.30 and 25 steers to Nanguin av 788 at \$3.75.

SHEEP AND LAMBS.

Receipts, Friday, 608; one week ago, 580. Market active and strong; all sold, closing firm.
Underwood sold Mich Beef Co 29 lambs av 95 at \$5.50.
McMullen sold same 111 lambs av 92 at \$5.50 and 5 av 84 at \$5.40.
Sutton sold same 46 lambs av 76 at \$5.40 and 5 sheep av 106 at \$4.

Richmond sold same 88 lambs av 95 at \$5.45 and 2 sheep av 210 at \$3.25.
Roe & Holmes sold same 35 lambs av 89 at \$5.35, 18 do to Fitzpatrick av 81 at \$5.25 and 9 sheep to Sullivan Beef Co av 104 at \$3.75.
F W Horner sold Fitzpatrick 21 lambs av 92 at \$5.55.
Weeks sold Young 13 lambs av 83 at \$5.50 and 4 sheep av 90 at \$3.50.
Spicer & M sold Bussell 28 lambs av 84 at \$5.50 and 32 do to Mich Beef Co av 70 at \$5.30.
Reason sold Fitzpatrick 32 lambs av 71 at \$5.25.
Dunlavy sold Mich Beef Co 40 lambs av 77 at \$5.35 and 41 mixed av 93 at \$4.25.
Spicer & M sold same 41 mixed av 93 at \$4.25 and 15 do av 95 at \$4.25.

HOGS.

Receipts Friday, 3,813, as compared with 3,088 one week ago. Market active and strong to 5c higher than above quotations; \$3.75 was highest mark paid, bulk at \$3.70 to \$3.75. All sold, closing firm, and 10 to 15c higher than one week ago.
Weeks sold Sullivan 114 av 139 at \$3.65.
Carman sold same 25 av 113 at \$3.50.
Henney sold same 22 av 206 at \$3.70.
Cassey sold same 71 av 180 at \$3.70.
Fox & Bishop sold same 123 av 184 at \$3.70.
Richmond sold same 65 av 130 at \$3.65.
Weitzel sold same 81 av 115 at \$3.60.
Roe & Holmes sold Randall 14 pigs av 79 at \$3.70.
Reason sold Hammond, S Co 52 av 203 at \$3.70.
Roberts & S sold same 54 av 196 at \$3.70.
Luckie sold same 57 av 216 at \$3.70.
Simmons sold same 82 av 221 at \$3.70.
Patrick & P sold same 56 av 192 at \$3.70.
Stabler sold same 102 av 194 at \$3.70.
McMullen sold same 39 av 230, 41 av 216 and 78 av 214 at \$3.70.
Spicer & M sold same 59 av 218, 31 av 192, 13 av 207, 43 av 209 and 91 av 231, all at \$3.75.
Eddy sold same 73 av 203 at \$3.72½ and 70 av 195 at \$3.70.
Carman sold same 72 av 200 at \$3.72½.
Discher sold same 54 av 206 at \$3.72½.
Younger & Moore sold same 106 av 216 and 78 av 224 at \$3.72½.
Jedele sold Parker, Webb & Co 106 av 165 at \$3.70.
Bergen sold same 57 av 147 at \$3.70.
Sutton sold same 30 av 195 at \$3.72½.
Parsons & H sold same 80 av 212 at \$3.72½.
Lovewell sold same 104 av 155 at \$3.70.
Hauser sold same 60 av 205 and 104 av 190 at \$3.72½.
H H Howe sold same 73 av 167 at \$3.72½.
Brown & Y sold same 70 av 202 at \$3.72½.
F W Horner sold same 96 av 204 at \$3.70.
Roe & Holmes sold same 76 av 195, 39 av 189, 37 av 225, 109 av 159 and 15 av 281 all at \$3.70; also 75 av 172 at \$3.72½.
Luckie sold same 122 av 186 and 62 av 202 at \$3.70.
Carter sold same 58 av 207 at \$3.72½.

OUR BUFFALO LETTER.

East Buffalo, January 20, 1898.

Cattle.—Receipts of cattle on Monday last were 4,498, as compared with 5,526 the same day the previous week, and shipments were 3,408, as compared with 4,884 for the same day the previous week. The market opened fairly active, with some decrease in the receipts. There was a fair demand from exporters, but most of the heavy steers lacked finish for this class of trade. Export and shipping steers were firm at the same range of values as at the close of the week; good fat light butchers, and handy steers and heifers were strong to a shade higher, while common coarse rough and slippery stuff were no higher than a week ago, and slow of sale. Bulls and oxen were unchanged, and steady and active for good quality; stockers and feeders steady to firm for light smooth, but slow for heavy, and rather lower. Since Monday receipts have been light, but the market has ruled dull and slow. Quotations at the close on Wednesday were as follows: Export and shipping steers—Prime to extra choice finished steers 1400 to 1475 lbs, \$4.90@5; prime to choice steers 1200 to 1400 lbs, \$4.70@4.85; good to choice fat steers 1200 to 1400 lbs, \$4.60@4.65; good to choice fat smooth steers 1100 to 1200 lbs, \$4.45@4.50; green coarse and rough fat steers, 1050 to 1400 lbs, \$3.75@4.30. Butchers' native cattle—Fat smooth dry fed steers 1050 to 1150 lbs, \$4.40@4.60; fat smooth dry fed light steers 900 to 1000 lbs, \$4.25@4.35; green steers thin to half fattened 1000 to 1300 lbs, \$3.60@4.15; choice smooth fat heifers, \$4.15@4.35; fair to good fat heifers, \$3.50@4; light thin half-fat heifers, \$3.25@3.40; good smooth well fattened butcher cows, \$3.60@3.90; fair to good butcher cows, \$3.30@3.50; common old shelly cows, \$2@2.75. Native stockers, feeders, bulls and oxen—Feeding steers, good style, weight and extra quality, \$3.75@4; feeding steers, common to only fair quality, \$3.25@3.65; good quality yearling stock steers, \$3.65@3.90; stock heifers common to choice, \$2.65@3.25; export, weight, bulls, fat and smooth, \$3.75@4; good fat smooth butchers' bulls, \$3.35@3.60; fair to good sausage bulls, \$2.75@3.25; thin, old and common bulls, \$2.50@2.70; stock bulls, \$2.85@3.25; fat smooth young oxen, to good lots fit for export, \$4.40@4; fair to fairly good partly fattened young oxen, \$3.25@3.90; old common and poor oxen, \$2.25@3. Veal calves—Veals choice to extra, \$6.75@7.25; veals good to choice, \$6@6.50; veal calves common, light thin to fair, \$4.50@5.75; heavy fed and buttermilk calves as to quality, \$4@4.50; grass calves, \$3.25@3.75.
Thursday cattle were steady and unchanged.

Sheep and Lambs.—Receipts, Monday, were 13,800, as compared with 17,500 the previous Monday; shipments were 9,000 as compared with 13,600 same day the previous week. With higher receipts the market ruled active and higher for best lambs, with others about steady; good handy sheep were active and firm, as were yearlings. As compared with last week, Monday's top lambs were a nickel higher, and other classes unchanged. About all offered were taken, and the market closed steady. Tuesday best lambs reached \$5.90@6 per cwt, but on Wednesday, under large receipts, lambs declined 5@10c, closing quiet. Sheep and yearlings held steady at an advance on best over Monday's prices. At the close on Wednesday quotations were as follows: Native lambs, choice to extra, \$5.75@5.90; fair to good, \$5.40@5.65; culls to

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common, \$4.50@5.25. Native sheep—Selected wethers, \$4.65@4.90; good to choice mixed, \$4.35@4.65; common to fair, \$3.90@4.25; culls to common, \$3@3.75. Yearlings—Choice to prime, \$5.10@5.25; fair to good, \$4.75@5.

Thursday the market ruled steady to strong for both sheep and lambs, at Wednesday's prices.

Hogs.—Receipts of hogs on Monday last were 29,640, as compared with 39,710 for the same day the previous week; and shipments were 20,520, as compared with 19,870 for the same day the previous week. The market opened with a good demand on about all classes of hogs, with values steady to strong as compared with the close of the week, but 10@12½c higher than a week ago Monday. The receipts were largely of light Yorkers and pigs, and this caused a firm feeling in heavy hogs of 250 and over, of which but few were on sale. At the close the market was steady except on light pigs, of which a number were held over. Other grades were well cleared out. Since Monday, under light receipts, a fair demand, and favorable reports from the west, the market shows further improvement. Quotations at the close on Wednesday were as follows: Good to choice Yorkers, 160 to 175 lbs, \$3.95; prime selected light Yorkers, \$3.95; mixed packers' grades, \$3.90; medium weights, 220 to 240 lbs, \$3.90; heavy hogs, 250 to 300 lbs, \$3.90; roughs, common to choice, \$3.30@3.40; stags, common to choice, \$2.30@3; pigs, good to choice, \$3.70@3.80; skips, common to fair, \$3.25@3.60.

Thursday the market was steady, with the bulk of good grades selling at \$3.92½; good pigs, \$3.70@3.80.

CHICAGO.

Union Stock Yards, January 20, 1898.

Cattle.—Receipts for last week were 49,729 head, as compared with 47,448 the previous week and 48,341 for the corresponding week in 1897. While the receipts Monday were less than the same day a week ago, the quality was the poorest of the year. The bulk of the offerings were half-fat, half-fed westerns and natives; a load of prime steers was a rarity, as was a load of fairly good ones; hence anything good sold quick at strong prices and anything else on its merits at the best price a salesman could get. Butchers' stock sold a trifle lower. There was a number of stock cattle buyers present, but no sales; prices as high as last week. The range on steers was \$4.30@5.35; heifers, \$3.80@4.25; cows, \$2.50@3.85; bulls, \$2.50@3.50. Up to and including Wednesday of this week, receipts have been 37,238, as compared with 34,500 for the same days last week. While the receipts have been large, the quality has been poor and the demand light. Fancy steers have held steady, but common to fair cattle slow and lower. On Wednesday top steers sold at \$5.35; for the week, \$5.25@5.50; fair to good export steers, \$4.75@5.15; dressed beef steers, \$4.25@4.50; canners, \$2@2.60; fat cows and heifers, \$3.25@4.25; bulls scarce and a little weaker, with sales mainly at \$3@3.50; odd lots of feeders sold a trifle lower, but the range is from \$4 to \$4.50; light stockers, \$3@3.90; veal calves, \$5.75@6.50 for tops.

Thursday's receipts were estimated at 11,500; market ruled quiet and barely steady.

Sheep and Lambs.—Receipts last week were 71,022, as compared with 67,728 for the previous week, and 71,778 for the corresponding week in 1897. Monday trade opened very active, owing to light receipts, some 9,000 less than the same day last week. Prices were steady to strong as compared with the close of last week. There were a large number of ewes among the receipts that sold at \$3.40 to \$3.85; good to extra mutton sheep sold at \$4.10@4.50, and yearlings at \$4.45@4.80; one lot of Mexicans at \$5. Top native lambs sold at \$5.60@5.75, same as last week, others \$5.25@5.50. Up to and including Wednesday receipts were 53,667, as compared with 49,048 for the same days last week. The increased receipts were largely half fat and thin lambs, which sold fully 20c per cwt lower than last week. Prime lambs sold Wednesday at \$5.65@5.70; a similar lot sold last week at \$5.80; the best lambs are a good 10c lower than on Monday. Nice heavy sheep were steady; in fact, all good muttons were steady; yearlings, \$4.40@4.80; muttons, \$4@4.25; common lambs, \$4.90@5.25; fair to good mixed mutton sheep, \$4@4.25; mutton ewes, \$3.75@3.90.

Thursday's receipts estimated at 16,000; best sheep and lambs steady, others slow but unchanged.

Hogs.—Receipts last week were 176,280, as compared with 262,480 the previous week, and 221,024 for the corresponding date in 1897. There was an active market, with values rather easier than at the close on Saturday, but not notably lower on the bulk of the sales. Shippers took a larger number than usual, and a Canadian buyer was present who took six double-decks of "singers," which will be sold undoubtedly to British consumers as "prime Canadian." Rough old sows and throwouts sold at \$3.45@3.50; prime packers and good mixed, \$3.55@3.60; prime mediums, butcher-weights and shippers, \$3.60@3.65; one or two lots, \$3.70. Syndicate sorters of light, say 130 up to 300, all good, to average 200, \$3.60@3.65; a single sort, \$3.65@3.70. Up to and including Wednesday of this week, receipts have been 97,241, as compared with 108,407 for the same days last week. The market has ruled firm at an advance in values, and the prospect for sellers is good. At the close on Wednesday rough old sows and throw-outs sold at \$3.45@

is one of the three important ingredients of a complete fertilizer; the others are phosphoric acid and nitro-

3.55; prime packers and good mixed, \$3.65@3.70; prime mediums, butcher weights, and shippers, \$3.70@3.75, one lot at \$3.77½; prime assorted light of 150@160 averages, \$3.60@3.65.
Receipts Thursday estimated at 28,000; market ruled active, at Wednesday's prices.

The agricultural appropriation bill has been reported by the committee of the whole to the House of Representatives with the seed distribution provision undisturbed.

Logan Carlisle, eldest son of ex-Secretary Carlisle, died at his father's home in New York last Sunday evening. He was taken sick in Washington and immediately removed to New York. His death is said to have been caused by a clot of blood on the brain. He was 39 years of age and unmarried.

Diseases often lurk in the blood before they openly manifest themselves. Therefore keep the blood pure with Hood's Sarsaparilla.

The Successful Incubator.

We have before us the new catalogue of the Des Moines Incubator Co., of Des Moines, Iowa, manufacturers of the Successful Incubator. So far as we are able to ascertain the results of this machine in actual operation are such as to give a hearty endorsement to the name. We see by reference to the annual catalogue that the manufacturers' guarantee is such as to leave very little to be desired. By the way, this 130-page catalogue is crowded with good things that ought to be in the hands of every man or woman who is interested in poultry. It is a handsome and valuable book and worth many times more than they ask for it. Send along 6 cts. in postage stamps and secure it.

Our readers will notice in another column an advertisement for a stock farm for sale by the Union Abstract Co. of Saginaw, Mich. This farm is one of the best in the State, and is offered for sale to close the business of a corporation. It has all the advantages of an improved stock farm. It is a bargain for you. Write at once.

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Horticultural.

SETTING OUT A VINEYARD.

To the Editor of the Michigan Farmer:
Last November I grubbed and plowed about 10 acres, which had been always used for pasture. I want to set it out in grapes. When is the best time to plant grapes, in spring or fall? If best to plant in fall had I better grow corn and cultivate, or just cultivate? Please advise me through The Farmer what is best to be done. The soil is heavy.

AUGUST LOEFFLER

St. Joseph County.

As the land has not been cultivated, we think it would be best to prepare well in the spring, put in a crop of corn, tending it thoroughly so that the ground will be well worked, and then plant your vines. We think fall planting the best for several reasons: The soil is in better shape, and the weather more settled; you will also have more time to spare, and the work is more likely to be thoroughly done. Then the soil will soon settle around the roots, which will be healed over and calloused by spring, and the plant will be ready to start a vigorous growth. If you prefer setting out the vines in spring we would advise growing a corn crop anyway. Then, as your land is heavy, plow pretty deep in the fall and in the spring work as early as possible; get your vines set as soon as the ground is in good shape. The soil should be thoroughly worked before the vines are set out, and it will be difficult to get this done the coming spring and get your vines in early enough. Work done before the vines are set out will save a great deal of work afterwards.

For The Michigan Farmer.

ONIONS FIGURATIVELY CONSIDERED.

All readers of prominent agricultural journals have heard of John L. Shawver through the publication of his plans for plank barn frames with self-supporting roofs. Mr. Shawver is on the Ohio Farmers' Institute force, and the other day I heard him for the first time. He is, I suppose, a farmer pure and simple, but when he stated that his daughters had grown onions at the rate of \$1,000 per acre I concluded that some of his family must be gardeners of an advanced sort. At first blush it seemed that there must be an error, but Mr. S. stood to his assertion, although he admitted that the patch was small—only a little over a square rod.

On my way home I run over in my mind the possibilities of the statement, coupled with my knowledge of the prices to be obtained with onions in bunches, and with the editor's permission will give some of the startling results.

There are 43,560 square feet in an acre, and allowing eight inches between rows and an onion every three inches, there would be six onions to each square foot, making the enormous total of 261,360 on an acre.

Gardeners who sell on the same streets that I do in Akron have two ways of bunching. When onions get to be about an inch in diameter some put six in a bunch and sell at a nickel a bunch; others put four in a bunch and sell at three bunches for a dime. The shapers all practice the latter method, as customers think they are getting them cheaper, and some who only want a bunch to put in the dinner soup will pay a nickel for the small bunch rather than send to the grocery or wait for a more liberal peddler.

Then a sharper will always work in at least one inferior bulb to a bunch, and three bunches to a dozen gives one chance more than two bunches. (My readers will perceive that I am giving away some of the tricks of the trade.) Whichever way the bunching is done the price figures the same, viz., 10 cents per dozen. Provided every onion grown is sold the result is a nickel per square foot, or \$2.178 per acre, or nearly \$700 more than friend Shawver claimed for his girls.

I will not waste space discussing the probabilities of getting such a yield, more than to say that one-quarter of that would satisfy all but the most avaricious of gardeners, and that it would scarcely be practicable to market a whole acre (even if the yield could be got) at the prices given, which are the highest retail figures to consumers.

If the onions are grown from sets, the season of sale may be prolonged to five or six weeks, as the varying size of the sets makes that difference in maturing, but if seed is sown the season of sale is often very short, as the

market is filled with mature southern onions sold at reasonable prices by the half peck.

The selling successfully of such stuff is no small item, as will be seen by considering the product of a single square rod. At the yield being considered, there would be 272 bunches, and it would be probable that at least a thousand stops would have to be made to sell them. If a trade had been established so that regular customers could be depended upon, and each took upon an average four bunches per week, it would take 68 customers per week. If the season was a long one lasting five weeks, then five square rods could be disposed of to that many customers, but it would require the canvassing of several populous streets to get rid of even that many. To leave theory and come down to actual practice, I know a family where three children (Germans) actually raised and sold in three years' time from a strip along one side of the family garden more than \$100 worth of onions. They lived two miles from a village of about two thousand population. Most of the onions were carried to market in baskets by the children (a boy and two girls), averaging about a dozen years of age. They began their sales about a mile and a quarter from home, and rarely sold more than two miles away, although they canvassed a number of streets within that distance. The children made a sort of pastime of the selling, starting from home before the sun was very high and getting sold out by nine or ten o'clock. The amount of ground used was small, but exactly how much I cannot say, although I often passed the garden. It certainly did not exceed four rods. As soon as the onions were sold a square rod or so was heavily manured, worked over, and seed sowed for sets for next year. Enough were raised for home use, and one year ten dollars' worth were sold in the spring in addition. The whole receipts came in early before anything could be sold from the farm but butter and eggs, and thirty odd dollars each year went a good ways toward their year's clothes.

Later in the season they picked berries for me, and the days when I could spare them they picked huckleberries and sold them, and in this way comfortably clothed themselves, besides having pocket money when they went to picnics and the circus, besides pennies for Sunday school.

One fact impressed me as I passed these children peddling onions, and that was that their customers almost all had waste ground in their village lots. Many of them worked short hours in the railroad shops, as things are generally dull in some departments in early summer, and could have grown their own truck in the time at command after four o'clock.

I suppose The Farmer has subscribers in the edge of many villages, and possibly in villages also, and the figures and possibilities and facts I have given may give a hint to ambitious, industrious children as to a way to earn some money and get business experience. Onions do not require new ground, but it should be very rich. Begin to manure it now, and have everything in readiness for the earliest possible start in the spring, so as to get an early market and secure customers among the first.

Remember, children, that where there is a will there is a way, and I should very much like to hear through The Farmer next July or August that some boy or girl had acted upon my advice and been successful.

L. B. PIERCE.

OTHER INSECT PESTS.

In the paper read by Prof. L. R. Taft before the State Horticultural Society in which reference was made to the San Jose Scale, the Professor also mentioned several other pests, one attacking the roots of peach trees, a species of aphid, and the pin-hole borer of the peach. Here is what he said about these insects:

"There is another insect which is becoming quite troublesome, and possibly to be feared fully as much as either of those mentioned, from the fact that it works under ground. During the last few years the fruitgrowers in Delaware and New Jersey, especially, have been greatly troubled by what they call yellows, which in this case was not true yellows. It did not exactly have the appearance of yellows, and when they came to examine it they found the roots covered with black aphid. During parts of the year they appeared also upon the young twigs and branches and leaves; and, as many nursery trees have come from

these sections, we have frequent reports of their presence in this state, and trees attacked have in most cases died as a result. The insect is much like the black aphid, spoken of on the cherry, but it is distinct from the other varieties of aphid, and being under ground it is of course very hard to treat. The trees you purchase from the nurseries, particularly from infected sections, should be examined and all insects upon the roots destroyed. We resort again to the same remedies mentioned for the scale insects. Either dip the roots in kerosene emulsion or in whale oil soap solutions. Either of these would destroy the insects, if the trees be left there a few minutes, and if your emulsion were properly made it could be used without harm. When it comes to treating the older trees we have more trouble. Of course, those on the branches would yield, but when they have grown two or three years the trees have been so injured it would not pay to bother with them. As to remedies, I would suggest, in sections it is difficult to reach the insects; and, too, in that case, the chances are that where you can get tobacco stems readily, that they be used. In them you would have a cheap and effective remedy, by scraping back the soil down to the roots and spreading there a layer of tobacco stems, using from a

(Continued on page 77).

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peck to a bushel per tree, according to size of the roots; and then, unless the soil be very moist, soak it with water. Or, if you prefer, you can make a tea, steeping the stems, and apply the water from this source. The tobacco water would be the safest and best remedy. Kerosene emulsion could also be used, and in some sections they have made use of potash salt; but the trouble there is that, unless you have a liberal amount, it does not kill the insects, and if you use a little too much it kills the trees; so I scarcely like to recommend that, if there is any possibility of saving the tree. You can use this at the rate of one thousand pounds to the acre, and if you figure out the number of feet your roots occupy, you can use it without much danger. If you permit this to come in contact with the roots directly it will be pretty sure to destroy them. These are some of the most troublesome of the recent insects, and the remedies are about the same for all. I might mention one or two hundred of these scale insects, and the same treatment could be recommended for all.

"There is one insect which is an exception, the pin-hole borer of the peach, the one which mines the trunks of the trees. It is a small borer which works its way around through the wood and in time destroys it. That being understood, it is difficult to in any way fight it, and the only thing I could recommend, if you know the insect is in your orchard, if it has begun to work there, is to treat the whole orchard, to prevent its entering any of the other trees. We found, two years ago at South Haven, a single tree in an orchard, showing the work of this borer, and to prevent its spread the trunks and branches of all the other trees, below the first crotch in the trunk, were treated with a wash containing a large amount of lime, and with lye. You can add wood ashes as well, and Paris green. We have used in that case, for a barrel of water, from a peck to half bushel of the lime and wood ashes. We keep it well stirred and then we add, for the thirty-two-gallon barrel, one quarter of a pound of Paris green, and in some cases I have used carbolic acid. I think this is of the least value, and it should be carefully used at best, and perhaps the wash would be as well without it. It depends so much on the strength of the acid that, as a rule, we mention only the harmless materials already recommended. This same wash I have tried on other trees to keep away borers, and simply used more water."

In answer to questions Prof. Taft said he applied this wash with a stiff brush or an old broom. In regard to killing the borers, I think it is a good plan to go over the trunks of the trees at this time of year, and use something of this kind, or to take the common lye, prepared lye, and add to that Paris green, and possibly carbolic acid, and dilute with water and apply with a pump. You can spray the trunks and branches; and, unless you have observed the effect of this, you will be surprised at the smooth and healthy appearance of the trunks.

IMPROVEMENT IN HARDINESS.

The ability to resist freezing or very low degrees of temperature is evidently constitutional. It is part of the law of the individual as it exists. No amount of treatment would induce a change from this constitutional character. A plant which could not resist freezing ages ago would not resist it to-day. Potato, tomato, egg plant and scores of others, which to-day are killed by the first white frost, will equally suffer ages hence. No selection of hardy plants, no change in climate or conditions, will avoid this certain doom.

But the constitutional hardiness of any plant is subject to a slight variation just as much as is every other characteristic of the plant. In the hardiness of plants there may be a variation of a degree or so, or part of a degree. One plant of any given species may be killed with the first very light white frost, while a neighboring individual of the same species may escape; but the following attack of frost a trifle more severe than the other will carry off the one which had this slight superiority, as well as the one which succumbed earlier.

This additional, though limited, resisting power can often be aided by the cultivator. As generally cultivated in gardens fruits and vegetables have deteriorated in resisting power. The practices of the cultivator are frequently at variance with the order of nature. Increasing succulence of plants, the size of the fruit, or other characteristics valued by the gardener, is frequently at the expense of general

hardiness. We can remedy these shortcomings. It is in this line that the cultivator proceeds in the cultivation of the peach. For instance, seed from trees that have never been grafted give an advantage to the kind which is grafted on it.

So with the orange, the wild, sour species is preferred by the orange grower to the seed from the most perfect orange. The wild, hardy orange of China, citrus trifoliata, has been used and found to give considerable resisting strength to the cultivated forms. Thus it is that, though we do not add anything to the original resisting power, we may by such selected practices as these restore to some extent the lost vitality.—Meehan's Monthly.

HORTICULTURAL NOTES.

The extension of orchard land in Great Britain, which has been in continuous progress during recent years, has been further emphasized in 1897, the total area now amounting to 224,116 acres, or 15,166 acres more than in 1892, when the aggregate area was 208,950 acres. The three western counties of Devon, Somerset and Hereford alone—pre-eminently our cider counties—contain 78,217 acres of orchards, representing 35 per cent., or more than one-third of the orchard area of Great Britain.

The New Jersey Horticultural report gives some suggestions regarding pear blight which are worthy of the attention of pear-growers. It says the first caution is to so manure and cultivate the tree that it will not grow too rapidly. Trees that are highly fertilized with nitrogenous manures are especially liable to blight. Manure only sufficiently to secure a good crop, and no more. Exterminate the blight germs by cutting and burning all infected twigs and branches as soon as seen. Do the same by any blight seen on apple, quince, crab, mountain ash, service berry and hawthorn, as it is the same disease, and will spread to nearby trees. Cut them whenever seen, but make thorough inspection and clean up before spring. Then keep a sharp lookout when the leaves start for any places missed, or where cutting was not deep enough.

Veterinary Department.

CONDUCTED BY DR. W. C. FAIR.

Advice through this department is free to our subscribers. Each communication should state history and synopsis of the case fully; also name and address of the writer. The initials will only be given. When an answer is requested by mail it becomes private practice and a fee of one dollar must accompany the letter.

Splint.—I have a three-year-old colt that went lame eight weeks ago. For a few weeks I could not see any swelling. Now I notice a small bump below knee on fore leg. W. J. K., Monroe, Mich.—Use Quinn's ointment twice a week.

Shoulder Sprain.—Five-year-old horse lame in right fore shoulder, caused by a sprain. The shoulder is swollen at point and is quite tender. H. J., Midland, Mich.—Blister shoulder with Gombault's caustic balsam once a week until he gets well.

Catarrh—Grub.—A Hampshire ewe has run at the nose for about seven weeks. I gave her tar but she does not seem to get any better. It is a sort of matter. She is in good condition and eats as well as the rest. She has not been wet or out in any snow storms. W. F., Chelsea, Mich.—Your sheep either has catarrh or grub in head. Give half dram sulphate of iron twice a day. If she has grub, trephine and wash grub out of its nest with tepid water. If it is grub she will soon get well after being operated on.

Surfeit—Mange.—Cattle seem to have some skin disease. The hair comes off in spots and thick white scaly scabs appear, which in some cases crack open. The spots appear mostly on the bony parts, as the head (eyelids especially) and legs, although the animals seem to itch all over. T. M. B., Pontiac, Mich.—Give one dram Fowler's solution of arsenic three times a day. Apply equal parts oil of tar, fish oil and raw linseed oil to sore parts of body three times a week. Wash them with hot water. Use tar soap.

How to Tan a Dog's Hide.—Eczema.—Will you tell me how to tan a dog's hide? Also what shall I do for four-months-old pigs that have scabs all over body. They rub themselves and make sores. Have been feeding ground corn and oats and bran in milk and water. E. E. L., Blissfield, Mich.—Remove all fat from skin and stretch hide on boards. Hang it up in a dry place

and use plenty salt. If you are near a tanner, better let him do it for you. Apply one part Zenoleum to fifty parts water once a day.

Megrims—Worms.—My fall pigs are dying. When they go to eat corn they take a mouthful then fly back and fall on side, struggle, tremble and squeal. After a while they get up and wander around, then eat some and lay in nest most of the time. Get weaker and are lame behind. J. E. L., Nashville, Mich.—Your pigs first suffer from a torpid liver and deranged digestion. Give enough epsom salts to purge them, and some ground nux vomica and bromide of potash twice a day in feed. Dose, ten grains nux vomica to five grains bromide of potash three times a day.

Congestion of Lungs.—My two-year-old heifer was taken sick and died within two days, and on examination found that her lungs were all inflamed. Had one sheep die from a similar cause. I have kept cattle and sheep for a great many years and have never lost any from same cause. G. D., Howell, Mich.—Your heifer and sheep died from congestion of lungs. The first and

most important thing to do in such cases, if treated early, is to give stimulants freely and apply plenty clothing to keep them warm. Hand rub the limbs. As soon as circulation is balanced the animal will get well.

Piles—Vertigo.—About forty pigs three months old, are being fed on mill feed, cooked and fed warm. They have a very nice warm house and are fat. Every few days some have the piles and die in a day or two. What is the cause? Also what ailed my calf? It suddenly seemed to become blind and would not eat. When let loose it would walk up against some object and then would push against it as hard as it could, grating its teeth. Then it would have fits and run as fast as it could until it came in contact with something, bleating as a calf will when badly scared. Had three such fits one afternoon and I killed it—W. B. J., Deer Creek, Mich.—Keep your hogs' bowels open and they will not be troubled much with piles. Your calf was overfed. It died from vertigo. Less feed and more exercise will prevent any more from taking it.

Saved from Death.

LIFE WAS EBBING AWAY WHILE IN THE MOUNTAINS.

A Woman was Rescued when in a Perilous Plight.
The Novel Method Used to Save Her.

From the Press, Ottumwa, Iowa.

Miss Lola Noble, of 416 East Maine street, Ottumwa, Iowa, daughter of Mr. E. M. Noble, the shirt manufacturer, has accomplished a work which will not only benefit her, but undoubtedly be of service to many others. It was a praiseworthy undertaking; one which she may feel proud of and amply repaid for her indefatigable efforts.

A reporter of the Press hearing of her successful achievement sought an interview with her.

Miss Noble seemed cheerful, hopeful and in the best of health. Apparently she had not suffered any ill effects from her efforts which were reported to have done much good.

About two years ago she accompanied her parents to the west, and resided among the mountains for several months. This was done in the hopes that her health might be improved, as she was suffering from anaemia. Instead of the change of climate benefiting her, she rapidly became worse and her parents hastily returned east with her.

Reputable physicians were summoned and exercised their skill, but it was of no avail. Her condition became worse and her face assumed a ghost-like appearance. She was wasting away for want of blood, and what little she did have, was watery and in a depraved state. Any slight exertion caused excessive fatigue, and palpitation of the heart. She had no appetite and the faintest viands did not tempt her. Her condition was deplorable and death seemed nigh. Many of her friends thought she was going into consumption.

Finally some friends advised her to try Dr. Williams' Pink Pills for Pale People, prepared by the Dr. Williams' Medicine

Company, Schenectady, N. Y., as they contained in a condensed form all the elements necessary to give new life and richness to the blood and restore shattered nerves.

They had learned of cases similar to hers which had been cured. The pills, they said, were inexpensive, only costing 50 cents a box or six boxes for \$2.50, and could be had at any druggist's.

Miss Noble was reluctant to try them, for it seemed as if all possible remedies had been tried and the expense had been considerable, without being benefited. Her friends were so enthusiastic regarding the good qualities of the pills, that she finally decided to try a box, and purchased one from E. M. B. Scott's drug store.

A decided improvement was noticeable after the pills had been taken and she purchased some more. The change in her condition was so great that after four boxes of the remedy, she considered herself well, and stopped taking the medicine. But her severe sickness could not be cured so soon and she was obliged to commence taking the pills again. After using a few more boxes, all traces of her fearful disease had disappeared. To-day, she is the picture of a healthy young lady, and she is as active as in her younger days.

Her father was so much impressed with the marvelous improvement wrought in the health of his daughter through the merits of Dr. Williams' Pink Pills, that he too is using them and is rapidly regaining his failing health.

Several have heard of Miss Noble's case and experience with these wonderful pills and are using them with satisfactory results.

THE HATCHING HEN

HAS LOST HER OCCUPATION and in the production and brooding of chicks she has been supplanted by the better and every way RELIABLE INCUBATORS and BROODERS. They Hatch and Brood when you are ready. They don't get lousy. They grow the strongest chicks and the most of them. It takes a 24 page book to tell about these machines and our Mammoth Reliable Incubator and Brooder Co., Quincy, Illinois.

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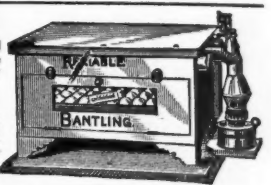
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Grange Department.

Our Motto:—"The farmer is of more consequence than the farm, and should be first improved."

Address all correspondence for this department to

KENYON L. BUTTERFIELD,
AGRICULTURAL COLLEGE, - MICH.

News from Michigan Granges is especially solicited.

TO SECRETARIES OF GRANGES.

Secretaries of all Subordinate and Pomona Granges are requested to send immediately to Miss Jennie Buell, Ann Arbor, Mich., secretary State Grange, the following information: The name and postoffice address of each of the following officers for the year 1898—master, lecturer, secretary. Also include name and number of Grange, and county in which located. Write names and addresses very plainly. This information is needed for immediate use.

GRANGE NEWS.

BOARDMAN VALLEY GRANGE, No. 664, could not install Jan. 12. Were "stalled" by a raging snowstorm.

Kalkaska Co. COR.
OLIVE CENTER GRANGE, No. 652, installed as master, L. J. Fellows; overseer, E. Watson; lecturer, Bro. Soerheide.

Ottawa Co. MRS. L. J. FELLOWS.
DECATUR GRANGE is small, but thoroughly alive. The installation, which was to have taken place Jan. 8th, was postponed two weeks.

Van Buren Co. H. L. S.
KALKASKA GRANGE installed officers and had an oyster supper Jan. 8th. We are looking for better days.

Kalkaska Co. H. A. BARNARD.
ALAEEDON GRANGE, No. 289, is alive and holding very interesting meetings every two weeks. Our membership is not large at present, but hope to report more members soon.

Ligam Co. M. E. HEDGER, Lect.
SOUTH BOSTON GRANGE, No. 175, Jan. 1 we installed officers in open Grange before a large attendance of both members and visitors. Great interest was shown. Four applications for membership. A general good time.

Ionia Co. JOHN S. TAYLOR, Sec.
PALMYRA GRANGE, No. 212, installed following officers: Master, Harley L. Cole; overseer, George Humphrey; lecturer, Carrie Everett; secretary, Mrs. Mary Cole. Installation was followed by an oyster supper.

Lenawee Co. E. S. EVERETT.
MT. TABOR GRANGE, No. 43, held their installation of officers January 8, R. M. Hogue acting as installing officer. The principal officers are as follows: Master, Mrs. R. V. Clark; overseer, G. N. Parketon; lecturer, Mrs. Nettie McCracken; secretary, Lida Hollenbeck.

Berrien Co. COR.
ORANGEVILLE GRANGE, No. 424, Christmas night we had a supper and a Christmas tree for both old and young; it was a most enjoyable occasion. We elected as officers: Master, C. A. Woodman; overseer, Edgar Brown; lecturer, Nettie Brown; secretary, E. A. Saddler. Officers were installed Jan. 8.

Barry Co. F. W. LIVINGSTON.
CANNON GRANGE, No. 39, elected officers as follows: Master, Fred Davis; overseer, F. Jay Howard; lecturer, Watson Barker; secretary, Geo. Hartwell. By energetic work our Grange is fast reviving from its dormant state, and is looking forward to a bright future.

Kent Co. F. JAY HOWARD, Cor.
WEST HANDY GRANGE, No. 613, Jan. 6th, Bro. Bignal, of Fowlerville, gave us an interesting talk. Bro. Huston, delegate to State Grange, reported from that meeting. Our attendance during the past year has been light, but we expect a revival.

Livingston Co. MRS. HELEN CHENEY.
HOME GRANGE, No. 129, during the past two weeks has reinstated six old members, and gained ten new ones; prospects for more. Jan. 8th we had installation and refreshments. The new officers are: Master, A. P. Gleason; overseer, L. Talmage; lecturer, Mrs. Will Davis; secretary, Mrs. Louise Elwood.

Calhoun Co. COR.
TALLMADGE GRANGE, met January 8. In the forenoon we initiated new members; in the afternoon installed officers, Bro. Mansor Smith acting as installing officer. About eighty Patrons and their friends enjoyed the ceremony and the program which followed. One very pleasant feature was a flag drill by some

of the young members, under the leadership of Bro. M. S. Smith.

Ottawa Co. SECRETARY.
IONIA POMONA, met with Banner Grange, No. 640. It was largely a business meeting, and election of officers. Banner Grange furnishing the program. Some good news was that Woodard Lake Grange is determined to revive and do good work for both itself and Pomona.

MRS. L. J. BARNARD, Lecturer.
COLFAX GRANGE, No. 680, The postal savings bank question was discussed at our last meeting. Every member expressed himself as favorable to the plan, and a petition was signed asking for their establishment.

Huron Co. S. J. McDOWELL.
RURAL GRANGE, No. 566, initiated two new members Jan. 8th. Bro. Geoffrey reported from State Grange, and installed officers. Oyster supper after installation. Several members said it was the best time they had ever had at our Grange.

Sanilac Co. N. C. KERR.
MONTCALM GRANGE, No. 318, met Jan. 8. It being the first meeting after election, the new officers were installed, and old officers reported. We have a balance of \$68, and we have one of the traveling libraries. Members in good standing, 80.

Delegate to State Grange, Mrs. C. H. Thompson, gave us the best report of the State Grange we have ever had.

Montcalm Co. J. M. PARKHURST.
BANNER GRANGE, No. 640, elected officers: Master, L. E. Hall; overseer, O. Vangieson; lecturer, G. T. Flanagan; secretary, Mrs. F. A. Falkner. A resolution was presented as follows: "That the so-called farmers' institutes are of no benefit to the farmers, and the appropriation for the same should be discontinued." But the resolution met with no support.

Ionia Co. COR.
STEEBINS GRANGE, No. 709, installed officers Jan. 15 as follows: Master, T. E. Niles; overseer, N. Wilkes; lecturer, R. Underwood; secretary, Lydia Marsh. The installing officers were Bro. and Sister Olds, the delegates to State Grange for Antrim county. Delegates' report, officers' reports, and a short program were given. The meeting was public to invited guests.

Antrim Co. REPORTER.
ADAMS GRANGE, No. 286, elected officers: Master, A. C. Edwards; overseer, A. M. Travis; lecturer, Wm. Kirby; secretary, Florence Huff. Jan. 4th the Cuban question was discussed. Bro. Welper gave a brief sketch of Gov. Pingree's speech before the Centennial Club in New York, and spoke appreciatively of the heroic manner in which the Governor is struggling for right and justice.

Hillsdale Co. FLORENCE HUFF.
RAVENNA GRANGE, No. 373, elected officers as follows: Master, Mrs. Nellie Knowles; overseer, Miss May Tuttle; lecturer, Jennie Batson; secretary, H. C. Tuttle. January 8 we had a very interesting report of State Grange by Bro. Thomson of Holton, delegate from Muskegon Co. We meet the first and third Saturdays of each month.

Muskegon Co. JENNIE BATSON, Cor.
BUTLER GRANGE, No. 88, installed the following officers Jan. 11: Master, M. L. Evans; overseer, F. J. Ramsdell; lecturer, Miss Agnes Rogers; secretary, H. P. Wilmarth. Bro. Reed, who installed, also gave a very interesting report of the State Grange.

Butler Grange has 114 members and six candidates for initiation. We meet every Tuesday evening and have a good attendance.

Branch Co. M. L. ROSSMAN, Cor.
WILLOW GRANGE, No. 618, celebrated its twenty-second anniversary and installed officers January 4. Our master is Wm. Galloway; overseer, Milton Coan; lecturer, S. McPherson; secretary, Mina Shetrum.

We own a good hall, and are free from debt; are in a fine farming country, and the indications are that we are entering on a year of great prosperity in Grange work. We meet on the first and third Tuesdays of each month.

Wayne Co. S. McP.
COLON GRANGE, No. 215, meets the second and fourth Saturdays of each month. We have over 50 members. Jan. 12th we installed officers, followed by a feast. Bro. Dell reported from State Grange. A few of our members think we do not get sufficient financial benefit in the Grange; most of us feel that the acquaintances formed and the benefits received from practical talks repay us for all our time and labor.

St. Joseph Co. MRS. E. WHITMORE.
ALLEGAN CENTRAL GRANGE is prosperous. Our members are extremely active in Grange work. In connection with the work suggested

by the State Lecturer, we are studying literature on a small scale, a plan which is meeting with gratifying success. We are reading Dickens' "Oliver Twist." We have a traveling library. Jan. 5th officers were installed by Bro. Vahue, and Sister Vahue reported State Grange.

Allegan Co. MARY BARTON.
VERONA MILLS GRANGE, No. 667, elected as officers: Master, Mrs. Laura Hunt; overseer, Drury Martin; lecturer, John Hunt; secretary, Mrs. Geo. Pangman. Officers were installed Jan. 8 by Bro. Morrison, of Hope Grange. Our delegate to State Grange gave us a good report and answered questions to the satisfaction of all, after which refreshments were served and a social time was enjoyed.

Huron Co. MRS. LAURA HUNT.
LA FAYETTE GRANGE, No. 92, met at the home of Brother and Sister Geo. T. English, and installed as officers, master, Geo. T. English; overseer, O. C. Burkhardt; lecturer, Mrs. F. H. Sweetland; secretary, H. A. Wilson. We meet the second and fourth Thursdays of each month at the homes of the members. We have applied for a traveling library.

G. T. ENGLISH, Master.
Washtenaw Co. PONTIAC GRANGE, No. 283, met Jan. 8th at the residence of A. S. Bartlett. The semi-annual supper was served. Seven new members were received. The lecturer enlarged upon the strength of the State Grange and its aid to Subordinate Granges. We had letters from several absent members living at a distance; the reading of these was a pleasant part of the program.

Oakland Co. LEWIS GRALEY.
CHICKAMING GRANGE, No. 382, Past-Master McKee installed our officers; had a good attendance; held an all-day meeting. At next meeting we shall discuss the postal savings bank. We have met once a month for the past six months, but voted at our last meeting to meet twice a month during the winter.

Berrien Co. MRS. A. K. CLARK.
COURTLAND GRANGE, No. 563, has a membership of 64 in good standing. Bro. and Sister Saunders, at our last meeting, reported from State Grange. We are having a contest between the brothers and sisters. We have added a porch to our hall. We have a library of our own; have also had a traveling library, and have sent for another one.

Kent Co. MRS. NANCY BURCH.
ADD ONE MORE. This time a new one. On Friday evening Jan. 14th, a new Grange was organized in northwest Rome township, Genesee county, by County Deputy Warren G. Shepperd, assisted by the Master of the State Grange. Twenty-three names were enrolled, and the charter left open until the next meeting.

ROME GRANGE, No. 293, installed officers January 8, as follows: Master, W. H. Hood; overseer, J. H. Combs; lecturer, Ray Dowling; secretary, J. F. Chase. Brother and Sister Wilcox gave us a short report of State Grange. Messrs. Thomas and Lewis, from Sand Creek gave an entertainment of illustrated songs at our hall on the evening of January 5, which was highly enjoyed. The upper room to our new hall is now completed, with a new carpet, paper and window shades.

Lenawee Co. DORA L. DOWLING, Cor.
NORTH ADRIAN GRANGE, No. 721, met January 7. The finance committee's report of our first year's work showed we were making rapid progress, having our hall ready for the plasterer, and being out of debt. State Master George B. Horton presented us with a full set of window shades for the whole building, for which we are truly thankful. As we have never done any initiatory work, a school of instruction was held, and two members taken through the first and second degrees. We expect to hold our next meeting in our new hall.

Lenawee Co. MRS. H. R. LADD, Cor.
GROVE GRANGE, No. 523, We have had some lively discussions about good roads. We are not all in favor of the county road system which is being agitated in this county, as it would not benefit those living on by-roads. We shall meet in the afternoon for a few months, thus expecting to increase attendance. We have a very comfortable hall. The St. Clair and Sanilac Pomona was held with us in December, with good attendance. The one-day Farmers' Institute in our vicinity was well attended, both by Patrons and members of the Farmers' Club.

St. Clair Co. MRS. C. A. LEPIEN.
HOPKINS GRANGE, No. 490, is in good working order. The hall has recently been re-shingled and newly papered and painted inside. All

expenses paid, and money left in the treasury. A program has been prepared for the winter meetings which takes the form of a contest. A question selected at a previous meeting is first discussed, followed by songs, recitations, etc., and a paper called "The Hopkins Granger," edited by one or more of the members. The winning side is to be treated to a feast furnished by their opponents. Meetings held each alternate Saturday afternoon.

Allegan Co. MRS. H. H. H.
RONALD GRANGE, No. 192, held its regular meeting Jan. 8; principal officers installed as follows: Master, E. S. Waterbury; overseer, E. S. Danner; lecturer, Cera B. Waterbury; secretary, Ella Harter.

A short pleasing literary program was rendered. Several visiting members present reported different branches of Grange work in their vicinity. We have added a new committee to the regular list, known as the "look-out committee," to look after backsliders and to get new members.

Report of State Grange was given by delegates and received with enthusiasm.

Ionia Co. W.
ROCKFORD GRANGE, Jan. 6th Bro. and Sister Saunders reported from State Grange, and installed officers. Jan. 8th we met at Sparta in a Union Grange meeting. Among other subjects, that of taxation was discussed. Also a scheme for a Kent county asylum for the insane. It was agreed that we do not need the asylum, as the county could not afford to build and maintain one. A resolution was passed sustaining the Dairy and Food Commissioner in his efforts to enforce the law. This Union Grange comprises the Subordinate Granges of Cannon, Courtland, Alpine, Grattan, Rockford, Silver Lake, and Sparta. The next meeting will be held at Silver Lake, Feb. 5.

Kent Co. E. R. KEECH.

INLAND GRANGE, No. 503. In the course of a paper read before the Grange on "Neatness," Bro. Edwards said, among other things: "Neatness in farming is a very essential element, and should form a part of economy. The yard should be kept very clean and sown to lawn grass, and be kept closely cut during the growing season. I am very much in favor of shrubbery and a modest amount of flowers. I believe also in having a clean barnyard; just as clean and neat as any other part of the farm. Loose pieces of boards, rails, and fence posts should not be scattered all over the yard. Do not allow all sorts of rubbish to collect in the lanes; buildings should be painted as often as necessary. A neat, well-kept farm finds a market at a much greater margin than a slovenly-appearing one."

NOTES FROM THE STATE MASTER. State Master G. B. Horton goes to Cass county, on Feb. 7th, to assist Deputy J. B. Mann for a week in organizing work.

The Patrons' Mutual Fire Insurance Co., of Lenawee county, held its first annual meeting on Monday, the 10th. Much interest was manifested by the large audience of Patrons present. The company has been in operation for about eight months, and fortunately has had no losses, and so far no assessments. Patrons of any county who desire to form a Patrons' Mutual Fire Insurance Co. can get copies of articles of association and by-laws by writing to R. A. Woolsey, secretary of the Lenawee county company. In writing, ask for the amended copies. There is no doubt that mutual fire insurance can be made a success through the Grange plan by counties. In newer parts of the State two or three counties might form a district.

LOWELL DISTRICT COUNCIL held its annual meeting at South Boston Grange hall Jan. 8. Reports were given of all Granges connected with the council, and nearly all were reported to be in a good, flourishing condition, including Bowne Center, South Boston, South Lowell and Keene. The old officers were re-elected: Master, Wesley Johnson; overseer, E. Hancorne; lecturer, J. C. English; secretary, Clayton Johnson.

The following resolution was adopted by a unanimous vote: "Resolved, that Lowell District Council heartily indorses the efforts now being put forth to enforce the oleomargarine section of the pure food law, which provides that oleomargarine must not be sold in the State unless free from coloration or ingredient that causes it to look like butter, and advise using Grange defense fund for that purpose."

"When is the best time to sow clover seed?" Bro. Aldrich: When ground is honeycombed in the spring. Bro. E. Hancorne preferred top-dressing to preserve it. Bro. Clarke said the time

is near at hand when it will be made a special crop and sown when nothing else is on the ground.

Next Council will be held at Keene Grange hall, Feb. 10.

Kent Co. CLAYTON JOHNSON, Sec.

HARMONY GRANGE, NO. 337.

In his report as master, Bro. Wilson said, among other good things: "I believe it is the duty of every farmer to join some farm organization, notably the Grange, because it is thoroughly organized and has the greater influence. If people keep up with the times and protect themselves from encroachment they must organize. There are many good and able farmers who are not members of any farm organization, yet the presence of the organization in this country has improved them in a degree. They have, as it were, breathed the air and felt the influence of organization; but how much better it would be if they would join. I want to suggest some improvements in our Grange: Officers and members should be on time, and the Grange should close on time, thus giving us longer for work and recreation. Committees should be prompt in reports, and every committee and officer should report at least once a year. I believe we would have better attendance if we went back to our old date of meeting—the second and last Saturday of the month."

Kent Co. LILLIE A. THOMPSON.
GRANGE GREETINGS FROM EATON COUNTY POMONA.

The Grange is an organization for farmers and for farmers and their wives and for those who have no interest antagonistic to the farm; all bound together by sacred obligations to advance the farmer in all ways possible. We labor for the good of our Order, our country, and mankind, by following the motto: "In essentials, purity; in non-essentials, liberty; and in all things, charity." We strive to develop a higher manhood and womanhood among ourselves, and to strengthen our attachment to our pursuit. We strive to do away with harmful prejudices and all selfish ambitions. We desire to bring the consumer and producer closer together. The non-partisan and non-sectarian attitude we hold does away with the objections of many and gives us smooth sailing along the plan of our work as an organization. We call especial attention to our attitude toward the ambition and sphere of woman.

The next meeting of Eaton County Pomona will be in Charlotte, Jan. 19.
M. A. JACOBES.

KENT COUNTY GRANGE

met at Whitneyville Grange hall Jan. 5 and 6. A large number were in attendance. The afternoon session of the first day was public. Bro. John Preston installed the officers for the ensuing year. Bro. Martin, delegate to the State Grange, gave a report. Music, recitations and readings were plentifully interspersed with the discussions. Special notice is due the young ladies' quartet club who so creditably rendered "Old Folks at Home."

At the evening session there was considerable discussion about our State schools, particularly the Agricultural College, and its expense to the people. The lecturer and county deputy exemplified the unwritten work. The following resolution was passed and forwarded to several of the county papers for publication:

"Resolved, that we believe the laws now in force relative to oleomargarine are just and wise enactments, and we appreciate the efforts of our pure food commissioner in prosecuting offenders of the same, and we are willing to render any assistance that we may be able to give him in the performance of his labors, and do recommend that in case of a shortage of funds for aggressive work in the way of prosecutions, the Executive Committee of the State Grange use the reserve defense fund for such purpose."

Thursday, memorial exercises in behalf of Bro. Robt. Dockeray were held. One feature which your correspondent was pleased to note was that the members did not wait to be called upon to give their views of the subjects under discussion. Grange closed at noon, after satisfying the inner man.

SECRETARY.

LENAWEE COUNTY.

THREE GRANGES ADDED TO THE LIST.
The formulated rules furnished all county deputies by the State Grange work successfully. Lenawee county now has 22 active working Granges doing good work along all lines, socially, educationally and financially. The County Grange is strong and active, holding six meetings annually. The Patrons' Mutual Fire Insurance Company has just closed its first fiscal

year with no assessment on its members. It is but reasonable that the Grange can use the machinery of its organization successfully in reducing the cost of mutual insurance to a minimum.

On Wednesday evening, Dec. 29, Macon Grange was reorganized with about 40 charter members. This was an especially unfortunate Grange in that the old workers had died or moved away and the younger class had not become interested, thus leaving the beautiful hall unoccupied for two years or more. The young farmers are now enthusiastic in its support and a long and useful career seems assured.

On Thursday evening, Dec. 30, the old Tecumseh Grange was reorganized from a few old and many new members, some 40 in all. This Grange has been dead for about 20 years. An active Farmers' Club has been in operation in the neighborhood of late, which led the farmers in that neighborhood to desire a more thorough organization. A prosperous future seems certain for this Grange.

On Wednesday evening, Jan. 5, the old Ridgeway Grange charter was brought into active use after a sleep of some 20 years. Over 40 enrolled as charter members and all are enthusiastic in the aims and objects set forth in Grange principles.

These Granges are the result of systematic work executed in detail, in accordance with plans sent to all county deputies. A new series of meetings is now in process. All that which has been done in Lenawee county can be done in all other counties, proportionate in size and population.

"Application Night" at Fruit Ridge resulted in gathering in about twenty names for membership in the Grange. This shows what a systematic plan of work will do.

Thomas Mars, chairman of the executive committee of the State Grange, is attending institutes in the northeastern counties in the interest of Grange extension.

The action of the State Grange in placing the lecturer of the State Grange in monthly communication with all subordinate Grange lecturers will be of great benefit to the Order if the local lecturers do their part.

H.

GENERAL TOPICS FOR DISCUSSION FOR JANUARY.

SUBJECT—POSTAL SAVINGS BANKS.

Resolved, That the National Grange, Patrons of Husbandry, recommend the establishment by Congress of postal savings banks for the reason that they would give the people absolute security from loss. A return in the way of interest on their savings. Afford convenience in making deposits. Be a prevention of poverty or temporary want by inculcating habits of thrift and saving. Would educate the children to the knowledge of the value and management of money. The postal savings bank would give to the country a contented, industrious, independent people who would feel a direct personal interest in the stability of government.

They would make available large sums of money, which are now hidden away where fires often destroy and thieves break in and steal.

SUGGESTIONS.

The subject of postal savings banks which is presented in this question, is one of great importance. It may have been discussed by the Grange, but continued agitation is necessary to secure the enactment of the required law by Congress, and the people should understand all the phases of the question, and the advantages that would accrue from the enactment of this law. At least six distinct questions can be formulated from this resolution and the proposition should be so presented as to be fully understood by all the members.

SUBJECT—CO-OPERATION.

We recommend that the Master of the National Grange issue a call for the appointment by each State Grange of a bureau of co-operative information, whose duties shall be to collect information as to kind of products for sale in the State, the amount and quality of the same, also to gather from other States such facts as to wants to be supplied as may lead to a direct exchange of the products of different sections. The recommendation of such a bureau shall be considered a sufficient guarantee of the quality of goods or of the reputation and financial standing of the buyer.

SUGGESTIONS.

This recommendation from the committee on co-operation is in the direct line of co-operative work among farmers in different sections of the country, and the subjoined resolution directs

the executive committee to carry out the provisions of the resolution. Two questions are presented for discussion. First, is co-operation in this direction desirable? Second, can it be made practicable among farmers?

THE RESOLUTION.

Resolved, That the Executive Committee of the National Grange be, and is hereby, instructed to so complete the establishment of the information bureau as ordered by the adoption of the report of the Committee on Co-operation, so as to provide for a collection of the information procured by States, and distribute the same in some cheap form for the benefit of all the States.

SUBJECT—FREE DELIVERY OF MAIL IN RURAL DISTRICTS.

It is with much satisfaction that we are now witnessing practical results from the persistent annual petitioning of this body and Granges in all parts of the country for the establishment of such a system in the delivery of mails as will give people in country homes the same advantages as are enjoyed by those who live in and near large towns and cities. The experiments now being tried in different parts of the country are, from best obtainable sources, proving sufficiently satisfactory to warrant a continuance and enlargement of the system so that in a few years free rural mail delivery will be established in most parts of the country and become a permanent government system.

Resolved, That we renew our petitions in National, State and Subordinate Granges for the general adoption of free mail delivery, and that our Legislative Committee be instructed to communicate to Congress our wishes by official petition.

SUGGESTIONS.

Free delivery of mail in rural districts will undoubtedly at first largely increase the expense of the postoffice department, and this is the only serious objection to its adoption at once. In the recent report of the postmaster general, it appears that if the abuses of the postoffice regulations in regard to second-class matter were corrected, the saving to the government would be sufficient to warrant the introduction of the system of free rural delivery. This being the case, pressure should be brought to bear upon Congress to correct these abuses as well as to give the country free rural delivery. It is only by constant and continued agitation that farmers can secure this much desired result.

Question.—To what extent will free delivery of mail in rural districts benefit the farming population?—National Lecturer Messer.

THE FARMER SEWING MACHINE.

A Few Testimonials Recently Received.

EXACTLY AS REPRESENTED.

Decatur, Mich., Dec. 16, 1897.
To the Editor of The Michigan Farmer:
The Michigan Farmer sewing machine, which we ordered of you came to Decatur Nov. 29 in good condition. It far surpassed our expectations in finish, and it does excellent work. In our judgment it is equal to any machine made, and when we consider the workmanship and finish, and complete set of attachments, it is amazing how it can be made for the price. It is in every way as represented, the shuttle especially is indeed all you claim it to be "a marvel of simplicity." As a farm paper The Michigan Farmer cannot be excelled.

Yours respectfully,
JAMES ORR.

BETTER THAN EXPECTED.

Owosso, Mich., Dec. 22, 1897.
To the Editor of The Michigan Farmer:
Your M. F. sewing machine received the last of September and would say that it is far better than I expected. I have given it a fair trial and it proves satisfactory in every respect.

Very respectfully yours,
MRS. WM. GOODWILL.

WELL PLEASED.

Grand Blanc, Mich., Dec. 4, 1897.
Publishers Michigan Farmer:
We feel it due to your firm to say we are well pleased with the sewing machine. We expected a good machine, for we took no little pains to look it up and compare it with others before we purchased. A prominent dressmaker of Flint, who had one from same source, expressed herself as being perfectly satisfied with the machine, and she has a greater number to try than we have. My daughter, who uses it mostly, is well pleased with it as well as with all the attachments, and its lightness of draft. My wife is also highly pleased with it after several months' trial on all kinds of sewing.

Yours very truly,
D. P. DEWEY.

HIGHLY PLEASED.

North Branch, Jan. 6, 1898.
Publishers of The Michigan Farmer:
I have received the sewing machine which you sent me, have given it a fair trial, and it has done good work. We are highly pleased with it, and thank you for your promptness in sending of same.

Yours respectfully,
MORRIS CALDERWOOD.

Have You Asthma or Hay-Fever?

Medical Science at last reports a positive cure for Asthma and Hay-fever in the wonderful Kola Plant, a new botanical discovery found on the Congo River, West Africa. Its cures are really marvelous. Rev. J. L. Combs, of Martinsburg, West Va., writes that it cured him of Asthma of thirty years' standing, and Hon. L. G. Clute, of Greeley, Iowa, testifies that for three years he had to sleep propped up in a chair in Hay-fever season, being unable to lie down at night or day. The Kola plant cured him at once. Mr. Alfred C. Lewis, editor of the Farmer's Magazine, was also cured when he could not lie down for fear of choking, being always worse in Hay-fever season. Others of our readers give similar testimony, proving it truly a wonderful remedy. If you suffer from Asthma or Hay-fever we advise you to send your address to the Kola Importing Co., 1164 Broadway, New York, who to prove its power will send a Large Case by mail free to every reader of THE MICHIGAN FARMER who needs it. All they ask in return is that when cured yourself you will tell your neighbors about it. It costs you nothing and you should surely try it.

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* 1:20 pm	Montreal, New York, etc.	* 1:50 pm
* 1:40 pm	St. Clair, Home & Pt. Huron	* 6:00 pm
* 10:40 pm	Buffalo, Toronto and New York	* 6:45 am

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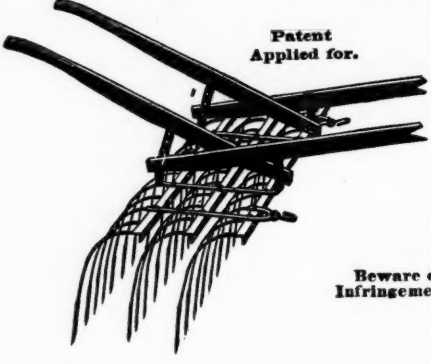
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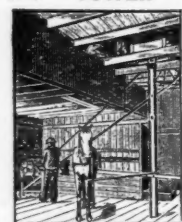
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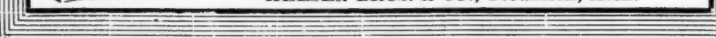
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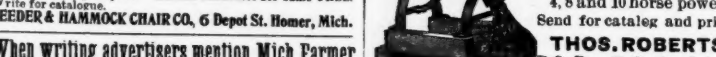
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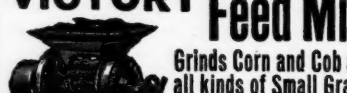


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